BULLETIN OF THE AMERICAN INSTITUTE OF ARCHITECTS

MDCCCLVII

September, 1947

Official Notices to Members
EMERGENCY HOUSING PROGRAM
COMMITTEE CHAIRMEN • BRIEFER SPECIFICATIONS

Public and Professional Relations
REPORT ON LEGISLATION

Education and Research
SUPPLEMENTARY DATA ON LIBRARIES
TECHNICAL NEWS • TECHNICAL BIBLIOGRAPHY

BULLETIN OF THE AMERICAN INSTITUTE OF ARCHITECTS

September, 1947

Contents

Vol. 1, No. 4

Emergency Housing Program 1

School Medal Awards for 1947 4

Circular of Information: Brief for a Briefer Specification 5

Committees of The Institute and Their Chairmen 9

As of Interest 11

DEPARTMENT OF PUBLIC AND PROFESSIONAL RELATIONS:

Report on Legislation, 80th Congress, 1st Session 13
By Anne Mott

DEPARTMENT OF EDUCATION AND RESEARCH:

The "Fireproof" Building 23

Steps in Research Programming 25

Supplement to Building Type Reference Guide No. 3,
The Library Building

American Archival Architecture 27
By Victor Gondos, Jr., A.I.A.

College and University Libraries 33

Library Lighting 34
By James M. Vetch

Supplementary Bibliography on Library Planning 42

Technical and Research News 44

Technical Bibliography 48

BULLETIN OF THE AMERICAN INSTITUTE OF ARCHITECTS is publiched bi-monthly at the Octagon, 1741 New York Avenue, N. W., Washington 6, D. C., in January, March, May, July, September and November. Supervising Editor: Henry H. Saylor. Subscriptions in the United States, its possessions and Canada, $2 a year in advance; elsewhere, $3 a year. Single copies, 50c. Special rate to corporate members of The Institute and to architectural student associates, $1 a year. Copyright, 1947, by The American Institute of Architects. Entered as second-class matter March 27, 1947, at the post office at Washington, D. C., under the Act of March 3, 1879.

Emergency Housing Program

To the Members of
The American Institute of Architects:

In December 1944 The Board of Directors of The Institute adopted "A Statement on Public Housing" which was printed in the February 1945 number of the JOURNAL. Economic and political developments in this country since that statement was issued have made it inadequate and obsolete. Accordingly, it was referred to the Committee on Urban Planning for review and report to The Board.

The Committee, at a recent meeting in Washington, has prepared tentative drafts of the following documents: I) Statement of Objectives for a Housing Program; II) Statement of Policy for a Housing Program; III) A Long-range Program; and IV) An Emergency Housing Program. Items I, II and III are being given further study by a sub-committee before submission to The Board. When these documents are approved and issued by The Board, they will supersede the statement described in the first paragraph above. Item IV, however, because of the necessity for prompt action, was considered at length and represents the unanimous recommendation of the Urban Planning Committee to the Board. It is, therefore, printed in full below.

This statement, with any amendments that may appear to be desirable, will be submitted to The Board of Directors of The Institute at its next semi-annual meeting—beginning on December 2, 1947—with the recommendation of the Committee on Urban Planning that it be formally adopted by The Board as the official position of The American Institute of Architects with respect to an emergency housing program.

In accordance with our democratic procedure, the individual menbers, the chapters and the state associations of The Institute are invited to consider this proposed statement and to send their suggestions and criticisms direct to the Chairman of the Committee—*not later than November 15*—so that all opinions may be considered before the document is submitted to The Board.

LOUIS JUSTEMENT, *Chairman,*
Committee on Urban Planning, A.I.A.
2011 K Street, N.W., Washington, D. C.

STATEMENT PROPOSED BY THE URBAN PLANNING COMMITTEE OF THE A.I.A., August 2, 1947

The results achieved with respect to relief of the post-war housing shortage have been unsatisfactory from almost every point of view:

1. The quantity of housing produced has been disappointing.
2. The quality of the housing that has been produced has been deplorable.
3. The cost has been excessive.
4. The real need—that of rental housing—has been largely ignored.
5. No attempt has been made to provide *any* housing for families of low income.
6. There has been practically no housing built for Negroes and other racial minorities, regardless of income.

It seems hardly possible that the results achieved could have been much worse if there had been no veterans' housing program. Perhaps the essential reason for the failure of the Wyatt program is three-fold: it relied too largely on restrictions and priorities at a time when the whole mood and temper of the people were directed towards removal of all war-time controls; it attempted to solve the entire housing problem on the basis of private housing and rejected any solutions requiring public housing; it did not sufficiently emphasize the need for rental housing.

Material shortages are gradually being relieved and there should, before long, be a steady and adequate flow of building materials. Equally important with the increased volume in construction materials is the return to a more balanced production of building materials as a result of the disappearance of controls. In many cases the materials produced for housing and for heavy construction are complementary, and they can be produced more economically for both kinds of construction than if the entire production of building materials is restricted to one type or the other. Within a period of two or three years there may be a reduction in the cost of building materials as a result of greater competition on the part of producers as well as lower production and distribution costs due to a more normally balanced production.

The shortage of skilled on-site labor is a more serious deterrent to an adequate expansion of construction, and constitutes the No. 1 problem of the building industry. We need, immediately, an improvement in the productivity of the limited supply of construction labor that is now available. In addition, we must accelerate apprentice training and the acceptance of apprentices by employers and labor unions if we expect to meet the nation's accumulated construction needs. An adequate supply of on-site labor, on the other hand, together with a steady flow of building materials, should remove many of the uncertainties and delays that now hamper construction and therefore reduce construction costs.

Despite the probability of lower construction costs within the next few years, however, we must produce new housing *now*, in order to relieve the most acute phase of the housing shortage and permit the gradual removal of rent control which is a necessary preliminary to a fully functioning housing market. It is not realistic to expect investors in rental housing to take the risk of building on the basis of today's prices. Unwilling home-purchasers are now compelled to buy in order to have a roof over their heads. Most of them will default, however, when the current housing emergency has passed if they find that lower prices have wiped out their equities. Speculative builders who have "mortgaged out" with FHA Title VI mortgage insurance will get what income they can for a few years and they will likewise default when faced with the competition of better-built projects at lower prices. In either case the FHA will have to make good any losses suffered by FHA insured mortgagees. If these losses are extensive, FHA insurance funds will be depleted and the Federal Government will have to make good the losses—for the financial soundness of the FHA, to date, is due to the fact that it has operated on a steadily rising market.

It would seem that the interests of home owners, rental housing investors and FHA mortgage insurance would be better served if prospective losses due to a future lowering of building costs were absorbed by the Federal Government *directly* as an inducement to produce quickly an adequate quantity of housing. The Federal Government should guarantee to make good the losses of purchasers of moderate priced homes and investors in medium-rental housing begun during the next two years that would be due *solely to a lowering of construction costs* during the five year period ending December 31, 1952. The computation of the loss would be very simple because it would be controlled by the variations in a Federally-established construction cost index similar to the Dodge index. It would be a simple matter of arithmetic to multiply the amount of the original mortgage by the factor thus produced and readjust the amount of the mortgage correspondingly. If there were no reduction in building prices the cost to the Federal Government would, of course, be nil. If, on the other hand, there were a substantial drop in construction costs, this result could take place without wholesale defaults and impairment of the entire FHA mortgage insurance structure.

The advantages of this proposal are as follows:

1. It would stimulate a maximum *early* volume of housing production by private enterprise, since the advantages given would not accrue to housing started *after* the two year period.
2. It would permit normal standards of appraisal, and normal methods of procedure on the part of FHA, private lending agencies and private enterprise. There is no delay, no red tape and no interference with established business procedures.
3. It would encourage a better *quality* of construction: the production of housing would not be forced below well-established standards in order to stay within cost limitations that are unrealistic on the basis of present prices. The building dollar has shrunken in value but human beings have not—they require the same space they did in 1939.
4. It would stimulate more responsible home-ownership, since protection is afforded to the home-owner as well as to the mortgagee.
5. It would stimulate production of rental projects by responsible sponsors.
6. The cost, if any, to the Federal Govern-

ment would not greatly exceed that which would result from a serious drop in construction prices that would deplete the FHA reserve fund (since FHA debentures are guaranteed by the Federal Government).

7. No immediate outlay of Federal funds is required.

It may be said that this program would encourage a continuation of the present high level of construction cost. This is only true to the extent that, without the program, there might be a buyers' strike of sufficient magnitude and duration to bring construction costs down. But it does not seem possible that such a buyers' strike could be effective in view of the pressure of the existing demand for all types of buildings. If our primary aim is to reduce construction costs we might consider stopping all construction. If our primary aim is to relieve the housing shortage, however, we cannot avoid building houses even though the present price level appears to be excessive.

Is there any good reason, however, why the entire risk of buying at present high levels should be shouldered by those who are unfortunate enough not to live in a dwelling which they bought or began to rent in the pre-war period? In the event of a substantial drop in future construction costs it would seem only fair to afford some relief to the citizen who is compelled by circumstances to buy at present prices.

The adoption of this proposal will in no way interfere with efforts which should be made, through all means at our disposal, to improve construction techniques and reduce costs. But it does not base all hope for relieving the housing shortage on a reduction of cost which may never take place.

The above proposal would be a tremendous stimulant to the production of housing by private enterprise, but it would not be sufficient to provide the necessary housing to meet the needs of Negroes and low-income families. Dwelling units vacated by the more prosperous families that are able to afford the cost of new housing have, in the past, been relied upon to supply the needs of low-income families. This system of "filtering down" fails absolutely in the face of a critical housing shortage.

The most effective way to take care of this phase of the housing problem will be to make use of administrative methods which we already possess: There should be an immediate resumption of public housing for the specific purpose of meeting the needs of the present housing emergency. Families of low-income and Negro families will have no relief if they are to depend entirely on the new housing produced by private enterprise. It should be obvious, on the other hand, that such families cannot be expected to wait 4 or 5 years until the housing shortage is over and the "filtering down" process can function again.

To summarize, we recommend the following program:

1. Stimulate in every way an intensive program of apprentice training which will produce, as rapidly as possible, an adequate supply of skilled on-site building labor.

2. Extend a Federal guarantee to purchasers of new homes costing less than $14,000 and investors in new rental housing against loss exclusively due to falling construction prices during the period ending December 31, 1952. This guarantee would be extended under the following conditions:
   a) Construction of dwelling units must be started prior to December 31, 1949.
   b) The extent of the loss, if any, would be computed by multiplying the amount of the mortgage by the difference between the construction cost index on the date of recording the mortgage and the construction cost index on December 31, 1952.
   c) The payment made, if any, would be used to reduce the amount of the mortgage. The interests of mortgagees would be protected without resort to FHA debentures, and the equity owners would benefit through reduced interest payments on the outstanding balance of the mortgage.

3. Undertake a public housing program of not less than 200,000 dwelling units per year for the next two years. This program would be similar to the U.S.H.A.

public housing built just prior to the war except as follows:

a) Construction cost limitations would be increased to allow the use of pre-war physical standards at current construction costs.

b) During the period of the housing emergency, the equivalent elimination of sub-standard housing would not be required.

c) During the period of the housing emergency, maximum annual-income limitations for tenants would be increased to $3,000 for veterans and to $2,200 for non-veterans.

Unless we are prepared for some such drastic action as we have outlined above we shall flounder around indefinitely: we shall sacrifice quality without obtaining quantity. The program we recommend will produce the quantity and kind of housing the country desperately needs—and do it with a minimum of disturbance to established methods of procedure in both the public housing and the private housing fields.

School Medal Awards for 1947

The School Medal of The Institute, established in 1914, was awarded during the scholastic year ending in 1947 to a student in each of the architectural schools accredited by the National Architectural Accrediting Board who was qualified by his scholarly standing and character and who had had not less than three years of residence and work in any of the accredited schools.

(The Board of Directors, at its meeting in April, 1947, directed that during the period of three years between The A.I.A. Convention of 1947 and the Convention of 1950—and subsequent to the procedure stated in the first paragraph hereof—the School Medals shall be awarded to students *in all architectural schools that have received them in the past,* and that after The Institute Convention of 1950 the School Medals shall be offered only to students of architectural schools accredited by the National Architectural Accrediting Board.)

These awards are made under the direction of the Committee on Awards and Scholarships, William G. Kaelber, Rochester, New York, Chairman, after the student has been proposed by the faculty to The Secretary of The Institute.

A copy of Henry Adams' book "Mont St. Michel and Chartres" is presented to the winner of the Medal and a second copy of the book is usually awarded to the runner-up. Many of the schools present the Medal and the books with appropriate ceremony at commencement time, and in many instances officers of local chapters of The Institute participate.

The recipients of the School Medal awards for 1947 and their schools are as follows:

Andrews, Norris Corsa—Yale University
Barnes, Oliver Roperick—The Rice Institute
Caputi, Eduardo M.—Catholic University of America
Cotner, Donald Lee—Oklahoma Agricultural and Mechanical College
Cottingham, James Edward—University of Oklahoma
Curry, Grant, Jr.—Princeton University
Dunlap, William E.—Illinois Institute of Technology
Estebo, William—University of Minnesota
Freytag, Karl John—Ohio State University
Goldberg, Abraham—Massachusetts Institute of Technology
Leaf, David M.—University of California
Lovett, Wendell Harper—University of Washington
Ludwig, William—Carnegie Institute of Technology
Means, George Calvin, Jr.—Western Reserve University
Mori, Ichiro Allen—Washington University (St. Louis)
Pearman, Charles—University of Michigan
Peirce, Donald Ripley—Cornell University
Porter, Paul Wilson—University of Pennsylvania
Rawlings, James Scott—University of Virginia
Reimann, Don Paul—Columbia University
Schroeder, Howard Edward—University of Illinois
Thomson, William Connor—Georgia School of Technology
Vanzo, Sylvester Peter—Syracuse University
Whitney, Richard Wallace—University of Washington
Winslow, Carleton Monroe, Jr.—University of Southern California

Circular of Information: Brief for a Briefer Specification

This Circular has to do with the Simplification of Specifications.
It holds promise of Easing the Drudgery of Specification Writing.
It points a Short-cut method of getting Better Results . . .
. . . with Less Effort

The Old Type Specification makes *Every Sentence a Contract Order*
Construction Substance is smothered in Contractural Form . . .
. . . except with Fixtures and Hardware.

If we may say . . . (as we have said for Decades) . . . for these *Parts of the Whole* . . .
"The Contractor Shall Furnish and Install the Following Fixtures:"
We may apply the Same Principle to the *Whole.*

This means a Complete Separation of Contract Jargon and Construction Techniques.
It means One Iron-clad Clause, instead of a Thousand Loop-holes.
It means Freeing the Architect to do an Architect's job.

There are Several Variations of such a Clause, framed to meet Various Needs . . .
a General Condition, or Scope of the Work, or merely Intent . . .
Used either once only, or at the head of each Sub-Division.

The Basic Idea and the following Cover-all Clause have run the Gauntlet of Counsel.
"*Mention Herein, or Indication on Drawings,*
of Articles, Materials, Operations, or Methods,
requires the Contractor (for this portion of the work)
to furnish and install each article or material mentioned or indicated,
of quality or according to qualification noted;
to perform each operation called for,
according to method or condition prescribed; and
to provide therefor all necessary labor, equipment and incidentals."

This control clause Eliminates Sentence Structure, Repetition, Verbiage.
It reduces the burden of Composing, Dictating, Typing, Interpreting.

The Application of the system involves No Set Forms—only Technical Tabulations.
It may be Adapted to Time-tested Office Forms.
It may be Varied to suit Individual Preferences.

There are Many Forms and Interpretations:

The Veterans' Administration has its own application.
James D. Beacham is publishing a good Verbless form.
Ben John Small abbreviates—like "ASTM" and "per Mfrs. spec."
A Government Committee added a Decimal sub-head system.
Some Architects do it Telegraphically.
The Author uses Headings and Sub-headings, with no surplus words.

The system has been covered by Copyright to prevent exploitation.

The Copyright has been Presented to The Institute.
Various proposals have been made for its use . . .
. . . a Complete Basic Outline, for elaboration;
. . . a Single Printed Page, for incorporation.
The Idea is So Easy of Application, however, that
the Need of Any Documentation is Questioned.
Architects are Asked to Try The System and Advise The Octagon

All the Essential Elements are Included in this Circular.

BACKGROUND REFERENCES

"Streamlined Specification" system, devised by Horace W. Peaslee, F.A.I.A.
Copyright, 1939: Presented to The American Institute of Architects: 1947

Originally published in *Pencil Points*, Aug. 1939: *The Constructor*, Nov. 1939

Adaptation of system developed by a Specification Committee of nine Agencies
published by National Bureau of Standards in BMS 87, July 1942
(*Available, Supt. of Documents, D. C.—a dime*)

Editorial Discussion, *A.I.A. Journal* Nov. 1945; Supplemented Feb. and Mar. 1946

Demonstration by James D. Beacham, A.I.A.	*Progressive Architecture* Amplification by Ben John Small, A.I.A. July, 1946.

(*Best exposition printed: more sections scheduled for Nov. '47 issue and thereafter*)

Stereotyped . . . COMPARISON OF METHODS . . . Simplified

Typical old-type specification with verbose sentence structure, and repeated mandatory provisions.	**Streamlined specification as used with a single governing mandatory clause and only half as many words.**
Surfaces *to which* waterproofing *is to be* applied *shall be* free *from* holes, cracks, projections, and conditions *that would* prevent *complete* adhesion *of waterproofing.* Waterproofing *shall not be* applied *at* temperatures lower than 50 *degrees* F. Surfaces *to receive* 3-ply membrane *waterproofing shall be* uniformly coated with hot coal-tar pitch. Over this coating *place* 3 layers *of* 32 inch *wide* coal-tar pitch saturated felt, lapping each sheet 22 inches *over the preceding sheet.* Lap ends *not les than 6 inches.* (*If* 36-*inch* wide *felt is used, lap sheets 24½ inches.*) Mop each *of the* sheets full width of lap, with hot *coal-tar* pitch *using not less than 25 pounds per square* for each mopping. *Over the* entire surface *apply* a uniform mopped-on coating of *hot coal-tar* pitch, *using not less than* 50 pounds per square.	*Condition of surface* for waterproofing: no holes, cracks, projections or conditions preventing adhesion. *Temperature* for application: 50°F.—minimum. Materials: coal-tar pitch—hot coal-tar-saturated felt. *Application:* Uniform coating of surface with pitch (40# per sq.) 3-Ply Membrane: Over base coating—3 layers 32″ felt, lapped 22″ or 36″ felt, lapped 24½″ —end-laps, 6″ or more —each sheet mopped full width of lap, with pitch (25# or more per square for each mopping). —Entire surface uniformly mopped with pitch (50# or more per sq.). (*Enough said—Why say more?*)

RECOMMENDED SUPPLEMENTARY GENERAL CLAUSES

The phrase "*Per*..............................*Code*" (*Regulation or Specification*) covers editions, including addenda, in effect at time of filing proposal.

Abbreviated forms include: Specs (Specifications): Mfrs. (....): AIA (....): AIEE (....): API (....): ASRE (....): ASTM (....): BM (....): CS (....): FS (....): NBS (....): FPL (....): NBFU (....): NEC (....): etc.—including any repeated phrases peculiar to any one specification. Vary to suit the individual job—and tabulate.

Named or numbered products to be used according to Mfrs. Specs. unless otherwise stated.

WORDS OF ENCOURAGEMENT for those Architects who are Free and Fearless in Design, and primed on Modular Coordination, but Timid about Specs.

These Architects have paved the precedent

"I consider streamlining a really valuable innovation . . . clarifies and organizes the material . . . favorable comments from both experienced builders and unlettered sub-contractors . . . latter type of mechanic is often bewildered by the conventional elaborate phraseology and . . . estimates higher than is necessary. Builders with an engineering background have said the same to me."

> " . . . the example of the contemporary trend toward streamlined specifications . . . by James D. Beacham the best so far published . . . "

"I have found your simplified and concise approach an asset in both writing and use as a document."

> "I have been writing . . . substantially the same form (from Job 689 to 765) by eliminating superfluous words. I endeavor to keep each requirement within the space of one full typewritten line, though this is not always possible."

"The writing of specifications has always been a laborious task . . . it means my own time and money to write and have typed long specifications . . . So the helpful article was timely, interesting, and useful to me."

> "The general principles developed . . . for writing specifications appear to me the best solution for this problem."

Any suggestions that would help me formulate this system I would greatly appreciate."

> "I am the one in our firm who writes the specifications and have advocated for a long time a simplified form. I have introduced streamlining to two other architects."

"Those general contractors, with whom I have discussed the system, like it. They considered the method an improvement over the old method with the long involved verbiage. They have had no quarrels with their sub-contractors as the text is easily understandable. I am of the opinion that a specification by means of lists and of schedules is more easily understood and is subject to fewer interpretations than one written in the old, conventional form."

> "It is a valuable educational process and aid to architects. I am heartily in favor of the principle . . . I am in favor, and always have been, of simplified specifications. I simply question . . . the degree of simplification. The idea is sound and I welcome the decision of the Executive Committee to emphasize it by bringing it before the profession."

A Dozen Specification Writers Can't Be All Wrong

"To meet the demand for short and uniform specifications for Government building construction, and in an attempt to reduce the time and labor now consumed in their preparation, a representative committee of Federal agencies has made a study of current specification-writing routine. The Committee advocates a directive method which, under proper supervision, should condense specifications, bring about important economies, and increase efficiency. . . . The style adopted is taken from that developed by Horace W. Peaslee, Washington architect, the distinctive features of which are (1) *a mandatory provision concentrated in a single governing clause* and (2) *the body of the specification in abbreviated outline form—with sentence structure eliminated.*"

The So-Called "Backward Bureaus" Look Forward

> "These specifications have received favorable comment from various industries, outside architects, and (other) Government Departments."

"It is believed that economy and efficiency in building construction, ease of inspection, and elimination of controversies through better understanding, will result from the reduction of specifications to their technical essence and minimum form."

"When I sent the specifications to their Washington office, for approval, I was doubtful of their acceptance in the streamlined form. I was really surprised and pleased when they were accepted and . . . the Zone Architect said they were good specifications."

"I am heartily in favor of the suggestion that specifications be condensed as much as possible and that all surplus words and phrases be omitted."

"Architects still use 'SHALL' and a lot of other needless expressions
. . . . which '*we of the cult*' have . . . .discarded."

MORE WORDS about LESS WORDS . . . "The only trouble is that the dead hands of our ancestors pull down on all of us, and a word or phrase once embedded in practice comes out harder than a wisdom tooth."

Three, Editorially Speaking

"The subject has proved so valuable to our subscribers that we have made definite arrangements for three of the series, and we're on the lookout for more." (*Progressive Architecture*)

" . . . The traditional specification (appears) as a document originating in a law office, its real meat obscured in a tangle of legal safeguards . . . justifiable if they were necessary to the fulfillment of the contractor's obligations, but they are not." (*Journal of A. I. A.*)

"During the War, on the HOLC Conversion Program, when time and effort were of the essence, we made good use of this system of specification writing. By having an all-inclusive paragraph in the General Conditions, the specification proper need be little more than a list of items included.

"Since that time I have followed the same system on other work. The change has been welcomed by all concerned. I feel certain that results have been reflected in lower bids."
(*National Architect*)

The Contractors Have a Word for It—COSTS

"It is our desire to promote your idea of 'streamlined specifications' . . . for we feel that it will be to the material advantage of the contractor, and will not only save him time in preparing estimates but will do a lot toward equalizing competition. We think it offers a solution to a problem which has confronted us for some time . . . our leading architects are inclined to agree with us that their specifications need modernizing."

"The form is excellent. It places the various features of each division or trade in a logical and uniform order; its brevity is helpful enabling the reader to find, promptly, and without unnecessary loss of time, the detail of item for which he is searching. It would be a great help to a contractor's office and field force if specifications following this form could be more widely used."

"The simplified specifications are a vast improvement . . . the estimators and job superintendents will be able to follow them much more easily."

"Simplifying phraseology and reducing to the least number of words consistent with the subject and purpose is a step in the right direction."

"Our estimators found them to be clear in intent which effected a saving of time. . . . In estimating work it is considerably easier . . . not contradictory . . . our entire staff prefers this form."

"Estimating departments are always busy when work is available to bid on and it is very disconcerting to have to wade through page after page of useless specifications in order to get at the specification writer's intent; and any short form, such as you have used, is certainly a great assistance to every one concerned."

" . . . It is much easier to make up an estimate . . . you will obtain better results from the builders and also better bids from the contractors bidding . . . "

" . . . There is no question in our mind but that this type of specification is much more desirable . . . "

"In talking with other contractors in this district . . . they agree with me that in simplifying and streamlining your specifications, you are doing a great thing . . . our estimator . . . not only discovered that the specifications were much more specific but also that his estimating time was cut to such an extent that it was a saving to this office."

And Finally, even the Lawyers Opine

"It was the unanimous opinion that . . . there exists no legal objection to Mr. Peaslee's suggestion, but that, on the contrary, any effort to condense and simplify is to be encouraged from the legal point of view as tending to avoid the uncertainty and argument often resulting from a verbose, complicated set of specifications . . . " (Government Committee)

> "We see no legal question involved in using these simplified specifications provided they are keyed to a master mandatory clause as is suggested, all definitions are clearly defined, and the elements of skill and responsibility are well understood." (Institute Counsel)

NOTE: This Circular of Information and its supporting data were submitted to The Executive Committee of The Institute at its meeting in Washington on July 29-31, 1947—by the originator and sponsor of the Streamlined Specification, Horace W. Peaslee, F.A.I.A., Washington, D. C.

The Executive Committee directed that the material be published in the Bulletin, as preliminary to the development of a standard document embodying the simplified system.

Comments and suggestions are invited, to be addressed to The Secretary of The Institute, at the Octagon.

Committees of The Institute and Their Chairmen

As a result of actions by the 1947 Convention and The Board of Directors various new committees have been created; some of the older committees whose objectives had been accomplished were discontinued; and there have been numerous changes in personnel and duties.

The complete roster of all administrative committees and of all standing and special Board committees, with their duties, will be printed in the November number of this Bulletin.

Meanwhile, in order that chapters and members may have essential information, the following list is printed to give the names of the committees and their chairmen, with addresses:

ADMINISTRATION

The Finance Committee
Gerrit J. deGelleke, Chairman
152 West Wisconsin Avenue, Milwaukee 3, Wis.

The Board of Examiners
Lucius R. White, Jr., Chairman
10 West Chase Street, Baltimore 1, Md.

The Jury of Fellows
Edgar I. Williams, Chairman
126 East 38th Street, New York, N. Y.

The Judiciary Committee
John L. Skinner, Chairman
Ingraham Building Annex, Miami 32, Fla.

Committee on By-Laws
Clair W. Ditchy, Chairman
5 West Larned Street, Detroit 26, Mich.

The Committee on Architectural Competitions
Eric Gugler, Chairman
101 Park Avenue, New York 17, N. Y.

Committee on Contract Documents
Wm. Stanley Parker, Chairman
120 Boylston Street, Boston 16, Mass.

Committee on National Capital
James R. Edmunds, Jr., Chairman
130 West Hamilton Street, Baltimore 1, Md.

Committee on Allied Arts
Charles Nagel, Jr., Chairman
Brooklyn Museum, Eastern Parkway
Brooklyn 7, N. Y.

Committee for Review of Competition Documents
Charles T. Ingham, Chairman
1211 Empire Building, Pittsburgh 22, Penna.

Committee on Restoration of The Octagon
Fiske Kimball, Chairman
c/o Philadelphia Museum of Art, Fairmount Park
Philadelphia, Penna.

Committee on Publications
Ralph Walker, Chairman
101 Park Avenue, New York 17, N. Y.

Institute War Memorial Committee
G. Corner Fenhagen, Chairman
325 North Charles Street, Baltimore 1, Md.

Committee on Standard Accounting Methods for Architects
(Appointment pending)

Committee on Standard Accounting Methods for Chapters
B. Kenneth Johnstone, Chairman
c/o Carnegie Institute of Technology
Pittsburgh 13, Penna.

Committee on Octagon Endowment Fund
(Appointment pending)

PUBLIC AND PROFESSIONAL RELATIONS

Committee on Membership
Searle H. von Storch, Chairman
Scranton Lackawanna Trust Building,
Scranton, Penna.

Committee on the Architect and Governmental Relations
J. Frazer Smith, Chairman
404 Goodwyn Institute, Memphis 3, Tenn.

Committee on Unification
Branson V. Gamber, Chairman
515 Hammond Building, Detroit 26, Mich.

Committee on International Relations
Julian Clarence Levi, Chairman
105 West 40th Street, New York 18, N. Y.

Committee on Industrial Relations
James R. Edmunds, Jr., Chairman
130 West Hamilton Street, Baltimore 1, Md.

Committee on International Congress of Architects
Ralph Walker, Chairman
101 Park Avenue, New York 17, N. Y.

Committee on Fees
Clarence B. Litchfield, Chairman
415 Lexington Avenue, New York, N. Y.

War Memorials Committee
John F. Harbeson, Chairman
1510 Architects Building, Philadelphia 3, Penna.

Joint Committee of The Institute and National Association of Home Builders
Julian E. Berla, Chairman
1636 Connecticut Avenue, N. W.,
Washington 9, D. C.

Advisory Committee to the Director of Planning of the United Nations
Eric Gugler, Chairman
101 Park Avenue, New York 17, N. Y.

Committee on the Archives of American Architects
Horace W. Peaslee, Chairman
1234 19th Street, N. W., Washington 6, D. C.

Committee on Fund Investigation for United Nations Competition
(Appointment pending)

Committee on Adjustments of Federal Income Tax Law
Louis Justement, Chairman
2011 K Street, N. W., Washington 6, D. C.

Committee on Housing Criteria
(Appointment pending)

EDUCATION AND RESEARCH

Committee on Education
B. Kenneth Johnstone, Chairman
c/o Carnegie Institute of Technology
Pittsburgh 13, Penna.

The Committee on Awards and Scholarships
William G. Kaelber, Chairman
311 Alexander Street, Rochester 7, N. Y.

Joint Committee of The Institute and The Producers' Council
Raymond M. Marlier, Co-Chairman
Empire Building, Pittsburgh 22, Penna.

Committee on Hospitalization and Public Health
Marshall A. Shaffer, Chairman
c/o Division of Hospital Facilities, U. S. Public
Health Service, Washington 25, D. C.

Committee on Urban Planning
Louis Justement, Chairman
2011 K Street, N. W., Washington 6, D. C.

Committee on Preservation of Historic Buildings
Turpin C. Bannister, Chairman
c/o School of Architecture and Allied Arts
Alabama Polytechnic Institute, Auburn, Ala.

Committee on Study of Local Public Buildings
James W. Kideney, Chairman
293 Summer Street, Buffalo 13, N. Y.

Committee on Atomic Age Architecture
(Appointment pending)

Committee on Building Codes
Walter C. Voss, Chairman
Department of Building Engineering and Construction, Massachusetts Institute of Technology,
Cambridge 39, Mass.

As of Interest

Semi-Annual Meeting of The Board

The next meeting of The Board of Directors of The Institute will be held in Charlestown, South Carolina, on December 3, 4, 5 and 6, 1947.

At that meeting budgets for 1948 will be adopted, the program of the 1948 Convention will be outlined, reports from various committees of The Institute will be considered and acted upon.

Other matters now on the agenda will relate to the general legislative situation in Washington, including public housing and Congressional investigations of the building industry; and to the policy of the Veterans' Administration with respect to the employment of private architects on its 1948 program of hospital construction.

As heretofore, the minutes of this meeting of The Board, in the form of a "Chapter Edition," will be sent to the presidents of all chapters.

Membership Emblem

In its report to the 1947 Convention in Grand Rapids, The Board announced a new emblem of membership in the form of a button or pin—available only to corporate members of The A.I.A. A number were sold during the Convention, but the special committee having charge was of the opinion that the new emblem did not quite meet the original specifications, which called for a dark maroon background to make the lettering much clearer.

The L. G. Balfour Company of Attleboro, Massachusetts, agreed to replace, free of charge, the emblems which were sold at the Convention, and purchasers were so advised by The Institute.

The Balfour Company also generously agreed to replace the unsold emblems with new ones having the desired background—at no cost to The Institute.

This new order has been delivered and the emblems are now on sale. They are priced at $6.00 each, which is the cost of manufacture, including tax, plus a nominal amount to cover distribution costs. Orders should be sent to The Secretary of The Institute at The Octagon and must be accompanied by check for $6.00. Be sure to specify pin *or* button.

All emblems are registered by number, and the names of purchasers are recorded at The Octagon.

The forthcoming October number of the Journal will have an illustration of the new emblem, with some background information concerning it.

Chapter Action on Applications for Corporate Membership

The Board of Examiners, which meets at The Octagon on the first Thursday of each month to pass upon applications for membership, has noted that some chapters fail to take action in reporting upon applications from their areas. This means that applications sometimes go before the Board without chapter recommendations.

Under the procedure of The Institute, each chapter receives a formal notice—with relevant information—concerning every applicant from its area, and is given thirty days in which to approve or disapprove. If no recommendation is received within this period a second notice is sent with an additional period of thirty days within which to respond. If no report is received from the chapter within the total sixty-day limit, the application goes before The Board of Examiners without record of chapter approval or disapproval.

The Board of Examiners believes that some of the chapters are under the impression that recommendations are not necessary if they have no adverse comment to make.

It desires, in all cases, to have before it recommendations from the chapters to which the applicants will be assigned if elected—be the recommendations favorable or unfavorable.

The Board hopes very much that the chapters will be diligent in making these reports even during chapter vacation periods.

Advisory Form of Chapter By-Laws

For many years The Institute issued A.I.A. Document No. 273 entitled "Standard Form of Chapter By-laws." Its various provisions were marked either "Mandatory" or "Optional," and practically all of the chapters of The Institute revised their documents accordingly.

At the December, 1946, meeting of The Board of The Institute, in accord with recommendations of its Committee on By-laws, Clair W. Ditchy, Detroit, Michigan, Chairman, The Board took action which changed the then "Standard Form of Chapter By-laws" into an *advisory* document.

The only mandatory requirement remaining is that all new chapter by-laws or amendments of existing chapter by-laws shall be consistent with the By-laws of The Institute, and shall be approved by The Secretary of The Institute, on behalf of The Board.

This fundamental change is in the interest of simplification and for the purpose of encouraging home rule and freedom of action within the chapters themselves.

The revised edition of the new document, under the title "Advisory Form of Chapter By-laws, A.I.A. Document No. 273—Revised Edition," was not printed until after the 1947 Convention in Grand Rapids in the thought that there might be Convention actions or By-law amendments which would be relevant.

There were none such, and the new "Advisory Form of Chapter By-laws" has been released for printing. It will be available to chapter officers upon request—in October.

MDCCCLVII

Department of Public and Professional Relations

EDMUND R. PURVES, *Director*

THIS department of the BULLETIN will be devoted exclusively to a report on those Acts of Congress *of possible interest to the members of the profession.* We have made every effort to have this report as complete as possible in all details. The complexity of many of the Acts of Congress and the difficulty of interpretation are such as to make possible some inadvertent omissions. No Acts of Congress are reported on which we have made reports in previous BULLETINS.

REPORT ON LEGISLATION, 80TH CONGRESS, 1ST SESSION

Prepared by Anne Mott

In this session, Congress considered a total of 7,289 measures introduced in the House and Senate and enacted into law 388 public bills and 131 private bills. This office has reviewed and recorded 593 bills.

The following bills have been signed by The President (on date indicated) and are now Laws.

Public Law 7—(H. J. Res. 121)—February 26, 1947: "United Nations Site Act of 1947"

Granting, in the case of income, estate, and gift taxes, deductions for contributions to the United Nations, but only if such contributions or gifts (A) are to be used exclusively for the acquisition of a site in the City of New York for its headquarters, and (B) are made after December 1, 1946, and before December 2, 1947.

Pursuant to this authorization a six-block-long area on the East River was presented to the United Nations, thus terminating the long and disturbing controversy regarding a permanent home for the United Nations.

Public Law 9—(S. J. Res. 33)—March 7, 1947:

Allowing additional time (until January 3, 1948) for the Philadelphia National Shrines Park Commission to submit its report to the Congress with regard to investigating the matter of the establishment of a national park in the old part of the City of Philadelphia, for the purpose of conserving the historical objects and buildings therein.

Public Law 46 (signed May 1, 1947) appropriates to the National Park Service $10,000 for the Philadelphia National Shrines Park Commission for necessary expenses to carry out provisions of P. L. 711 signed August 9, 1946.

Public Law 20—(H. R. 1968)—March 22, 1947: "Urgent Deficiency Appropriation Act, 1947"

Making appropriations to supply urgent deficiencies in certain appropriations for the fiscal year ending June 30, 1947, and for other purposes. Total amount appropriated — $179,645,668. Rescissions — Cash $567,461,151, Contracts—$132,000,000.

Among other items, appropriates an additional amount for the Office of Price Administration transferred to the Office of Temporary Controls of $7,051,752, to be available for the payment of terminal leave only; provided that the funds heretofore and herein appropriated shall include expenses incident to the *closing and liquidation of the Office of Price Administration and the Office of Temporary Controls* by June 30, 1947.

Appropriates to the Veterans Administration additional amount of $165,000,000 for administration, medical, hospital, and domiciliary services provided the amount available to repair, alter, improve, or provide facilities in the hospitals and homes under jurisdiction of the Veterans Administration is increased to $5,500,000.

Title II makes a reduction in the Veterans Administration for hospital facilities and services of $8,469.39 from appropriations and other funds. Also under Title II are rescissions for the Federal Works Agency, Federal Security Agency, National Housing Agency, Department of Labor, Navy Department, War Department, and others.

Public Law 25—(H. J. Res. 159)—March 29, 1947:

Making appropriations to supply deficiencies in certain appropriations for the fiscal year ending June 30, 1947, and for other purposes. Total amount appropriated—$243,255,607.

Among other items, to meet increased pay costs, provides a deficiency appropriation to the Veterans Administration of $48,272,500 in the administration, medical, hospital, and domiciliary services; to the Federal Works Agency, Public Buildings Administration—$4,321,100.

Public Law 38—(H. R. 731)—April 25, 1947:

Establishes the Theodore Roosevelt National Memorial Park in North Dakota and further authorizes the Secretary of the Interior to obtain by purchase or condemnation proceedings lots 2, 3, 4 and 6 of section 33, township 144, range 102, and to reconstruct the buildings thereon providing that the total cost of such land and buildings shall not exceed $40,000.

The Secretary of the Interior is also authorized to erect a monument in memory of Theodore Roosevelt in the village of Medora, North Dakota, with the advice of the Commission of Fine Arts, provided that the cost of the monument shall not exceed $35,000.

Authorizes to be appropriated such sums as may be necessary to carry out the provisions of this Act.

Public Law 46—(H. R. 2849)—May 1, 1947:
"First Deficiency Appropriation Act, 1947"

Making appropriations to supply deficiencies in certain appropriations for the fiscal year ending June 30, 1947, and for other purposes. Total amount appropriated, $2,835,161,509.

Among other items, appropriates to Federal Works Agency, Public Buildings Administration, additional amount of $2,700,000 towards salaries, and expenses, public buildings and grounds in the District of Columbia and adjacent area.

Appropriates to the Veterans Administration an additional amount for administration, medical, hospital, and domiciliary services $142,258,000, provided amount available to repair, alter, improve or provide facilities in hospitals and homes under jurisdiction of the Veterans Administration is increased to $7,260,000.

Appropriates $10,000 to the National Shrines Park Commission for necessary expenses to carry out provisions of P. L. 711 signed Aug. 9, 1946 (see Public Law 9 above).

Public Law 76—(H. R. 3245)—May 26, 1947:
"Second Deficiency Appropriation Act, 1947"

Making appropriations to supply deficiencies in certain appropriations for the fiscal year ending June 30, 1947, and for other purposes. Total amount appropriated, $192,438,858.

Among other items, appropriates to the Federal Works Agency, Bureau of Community Facilities for Veterans' educational facilities an additional amount for the completion of construction and installation of veterans' educational facilities, $3,000,000, to be available until expended, but not to be available for new projects after September 30, 1947, of which amount not to exceed $100,000 shall be available for administrative expenses, provided that no part of this appropriation shall be used for the relocation of any building at a cost greater than $3 per square foot.

Appropriates to the State Department for United States participation in the United Nations an additional amount of $4,195,347.

Appropriates to the Bureau of Community Facilities for increased pay costs, Title II towards "War public works (community facilities) liquidation" increase of $100,000 in authorization to expend unobligated balances.

Public Law 78—(H. R. 1584)—May 27, 1947:

Authorizes the erection and operation of a memorial museum and shop on the Fort Hall Reservation, Idaho, and authorizes to be appropriated the sum of $150,000, for the purpose of erecting the memorial museum, in commemoration of old Fort Hall, and a shop for the sale of Indian handicrafts.

Public Law 80—(H. R. 3029)—May 29, 1947:

Provides for the acquisition of a site and for preparation of plans and specifications for a courthouse to accommodate the United States Court of Appeals for the District of Columbia and the District Court of the United States for the District of Columbia.

Under this law the Architect of the Capitol is authorized to prepare drawings and specifications and to employ the necessary personnel and other services, to enter into the necessary contracts, and authorizes to be appropriated a sum not in excess of $400,000 for such purposes, which shall include all architectural fees. (Appropriation reduced to $370,000—P. L. 271—July 30, 1947.)

Public Law 85—(S. 854)—May 31, 1947:
(Companion Bill H. R. 2780)
"Veterans Housing Act of 1947"

To amend section 502(a) of the Act entitled "An Act to expedite the provision of housing in connection with national defense, and for other purposes.

Authorizes expenditure of $35,500,000 additional for housing construction for distressed families of servicemen and veterans. (Appropriation made July 29, 1947, Public Law 256.)

The housing program for veterans' families in educational centers had been deplorably slow and provision was made in this Act to speed up and complete construction for student veterans and their dependents.

Public Law 111—(H. J. Res. 188)—June 25, 1947:
(Companion Bill to S. J. Res. 109)

Authorizes the erection on public grounds in the city of Washington, District of Columbia, of a memorial to the dead of the First Infantry Division, United States Forces, World War II.

The Secretary of the Interior is authorized and directed to grant the Memorial Association of the First Infantry Division, United States Army, permission to erect a monument to the dead of the First Infantry Division, U. S. Forces in World War II. The site chosen and the design of the monument and pedestal shall be approved by the Joint Committee of Congress on the Library with the advice and recommendations of the National Commission of Fine Arts.

Public Law 120—(S. 1230)—June 26, 1947:

To amend section 2(a) of the National Housing Act, as amended. Extends from June 30, 1947 to January 31, 1948 wartime Title VI of the National Housing Act, involving FHA guarantees of the Veterans Housing Program.

Public Law 122—(H. R. 3791)—June 27, 1947:
"Second Urgent Deficiency Appropriation Act, 1947"

Making appropriations to supply urgent deficiencies in certain appropriations for the fiscal year ending

June 30, 1947, and for other purposes. Total amount appropriated $72,236,257.

Among other items, appropriates an additional amount to the Veterans Administration for administration, medical, hospital, and domiciliary services—$28,400,000.

Public Law 132—(S. J. Res. 135)—June 30, 1947: (Companion Bill to H. R. 3916) "Reconstruction Finance Corp. Act of 1947"

Under provisions of this act the RFC was extended with many changes in organization and powers for 1 year with lending authority of $2,000,000,000. Loans for domestic improvements, State and local, were authorized, including power to purchase surplus property for resale to small business, to obtain a wider national distribution of such surplus through small business outlets.

Public Law 138—(H. R. 2545)—June 30, 1947: (Companion Bill S. 1318)

Provides funds for cooperation with the school board of the Moclips-Aloha District for the construction and equipment of a new school building in the town of Moclips, Grays Harbor County, Washington, to be available to both Indian and non-Indian children. There is authorized to be appropriated $88,000. (Appropriation—Public Law 299—July 31, 1947.)

Public Law 147—(H. R. 2436)—July 1, 1947: "Treasury and Post Office Departments Appropriation Act, 1948"

Making appropriations for the Treasury and Post Office Departments for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $3,216,509,450, distributed as follows: Treasury—1,684,848,400, Postoffice—1,531,661,050.

Among other items, includes an appropriation to the Coast Guard of $2,300,000 for the acquisition of aircraft, vessels and the *construction, rebuilding, or extension of shore facilities, including the acquisition of sites and improvements thereon when specifically approved by the Secretary of the Treasury.*

Public Law 156—(H. J. Res. 193)—July 1, 1947:

Grants authority for the erection of a permanent building for the American National Red Cross, District of Columbia Chapter, Washington, District of Columbia.

Plans of the proposed building shall first be approved by the American National Red Cross, the Commission of Fine Arts and the National Capitol Park and Planning Commission and the erection and design shall be under the supervision of the Administrator of the Federal Works Agency.

Moneys of the American National Red Cross, District of Columbia Chapter, available for construction of the building, including any amount administratively determined necessary for payment of salaries and expenses of personnel engaged upon the preparation of plans and specifications, field supervision and general office expenses, may be transferred to and expended by Public Buildings Administration of Federal Works Agency and the Commissioner of Public Buildings is authorized to prepare drawings and specifications for this building prior to approval by the Attorney General of the title to such acquisition.

Said building shall cost not less than $1,000,000, provided this expenditure shall include complete equipment.

The person, firm or corporation which the Commissioner of Public Buildings shall select to furnish professional architectural and engineering services required for project shall be chosen from nominations made by the American Red Cross, District of Columbia Chapter.

Public Law 157—(S. J. Res. 113)—July 1, 1947:

Authorizes the erection in the District of Columbia of a memorial to the Marine Corps dead of all wars.

The Secretary of the Interior is authorized and directed to grant authority to the Marine Corps League, Incorporated, to erect a memorial on public grounds in the District of Columbia in honor and in commemoration of the men of the United States Marine Corps who have given their lives to their country.

The design and site of such memorial shall be approved by the National Commission of Fine Arts. Authority conferred shall lapse unless (1) the erection of such memorial is commenced within five years from date of passage of this resolution, and (2) prior to its commencement funds are certified available in an amount sufficient, in the judgment of the Secretary of the Interior, to insure completion of the memorial.

Public Law 161—(H. R. 4031)—July 3, 1947: "Emergency Appropriation Act, 1948"

Making appropriations to meet emergencies for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $6,180,000.

Among other items, authorizes the Administrator of Veterans' Affairs to disburse, during July, 1947, one-twelfth of the amount provided for the Veterans Administration in the Independent Offices Appropriation bill (H. R. 3839—Public Law—269).

Public Law 165—(H. R. 2700)—July 8, 1947: "Labor-Federal Security Appropriation Act, 1948"

Making appropriations for the Department of Labor, the Federal Security Agency, and related independent agencies, for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated, $1,674,158,631; distributed as follows: Labor — 75,850,901; FSA — 901,670,630; Related Agencies — 696,637,100.

TITLE I

Among other items, appropriates to the Department of Labor for the Apprentice Training Service $2,107,800. (The American Institute of Architects supported this appropriation.)

TITLE II

Among other items, appropriates to the *FEDERAL SECURITY AGENCY* for:

Howard University for the preparation of plans and specification for construction, under the supervision of the Public Buildings Administration, on the grounds of Howard University of men's dormitory units, a law school building, administration building, biology building, and greenhouse, and for alterations to science hall, including engineering and architectural services, printing and binding, and travel, $220,000, which amount, except such part as may be necessary for the incidental expenses of the university, may be transferred to the Public Buildings Administration, Federal Works

Agency, for the above purposes, to remain available until expended.

For beginning construction, on the grounds of Howard University, under the supervision of the Public Buildings Administration, of a dental school building, an auditorium building with facilities for the school of music and the teaching of fine arts, together with alterations and installations in connection with this construction, including engineering and architectural services, printing, and travel, to remain available until expended, $2,022,080, which amount, except such part as may be necessary for the incidental expenses of the university may be transferred to the Public Buildings Administration, Federal Works Agency, for the above purposes, and the university is authorized to contract for the completion of said construction at a total cost of not to exceed $4,109,755.

Public Health Service for hospital and construction activities for administrative expenses incident to carrying out Title VI of the Public Health Service Act, as amended (Public Law 725, 79th Congress) $865,000. There shall be allotted to the several States for the fiscal year 1948, as provided in such Act, a sum not exceeding $75,000,000, a part of the sum authorized to be appropriated for the fiscal year 1948 by part C of the Act. Whenever the Surgeon General shall have approved an application for a construction project in accordance with section 625 of the Act, the Federal share of the cost of such project, as provided by the Act, shall constitute a contractual obligation of the Federal Government, provided, that the aggregate contractual obligation during the fiscal year 1948 shall not exceed $75,000,000.

National Cancer Institute—to enable the Surgeon General, upon the recommendations of the National Advisory Cancer Council, to make grants-in-aid for research and training projects relating to cancer, *including grants for erection of buildings and acquisition of land therefor,* etc., and to otherwise carry out the provisions of Title IV of the Act, $14,500,000.

Construction of research facilities—For the acquisition of a site, and the preparation of plans, specifications, and drawings, for additional research buildings and a six-hundred-bed clinical research hospital and necessary accessory buildings related thereto to be used in general medical research, including cancer and cardiovascular diseases, to be immediately available and to remain available until expended, $2,650,000, which amount, except such part as may be necessary for the incidental expenses of the Public Health Service, shall be transferred to the Public Buildings Administration for the performance of the work for which the appropriation is made.

Public Law 166—(H. R. 3311)—July 9, 1947:

"Departments of State, Justice and Commerce, and the Judiciary Appropriation Act, 1948"

Making appropriations for the Departments of State, Justice and Commerce, and the Judiciary, for the fiscal year ending June 30, 1948, and for other purposes.

Total amount appropriated—$551,175,932 as follows: State Department—232,724,703; Justice Department—107,488,230; Commerce—191,914,834; Judiciary Department—19,048,165.

Among other items, appropriates to the *State Department* for United States participation in *United Nations* $12,578,240, of which amount $10,949,805 shall be available for contribution to the United Nations.

Appropriates for United States participation in the United Nations Educational, Scientific, and Cultural Organization $3,703,385, of which amount $3,500,385 shall be available for contribution to and advance to the revolving fund of that Organization.

Also appropriates moneys to assist in the international exchange of professional and artistic personnel.

For the liquidation of the Information and Cultural Program—$1,430,000.

Among other items, appropriates to the *Department of Commerce* for the *Civil Aeronautics Administration:* for carrying out the provisions of the Federal Airport Act of May 13, 1946 (except section 5(a)), $32,500,000, to be available until June 30, 1953, of which $29,000,000 shall be for projects in the States in accordance with sections 5 (b) and 6 of said Act, and $1,662,500 shall be for projects in Alaska, Hawaii, and Puerto Rico in accordance with section 5 (c): Provided That not to exceed $1,837,500 of the said $32,500,000 shall be available as one fund for necessary planning, research, and administrative expenses; including personal services in the District of Columbia; of which $1,837,500 not to exceed $176,000 may be transferred to the "Salaries and expenses, Civil Aeronautics Administration", to provide for necessary administrative expenses, including the maintenance and operation of aircraft, and $26,000 may be transferred to the appropriation "Printing and Binding, Department of Commerce": Provided further, That the appropriation under this head for the fiscal year 1947 is hereby merged with this appropriation.

Public Law 169—(S. 723)—July 11, 1947:

Authorizes the preparation of preliminary plans and estimates of cost for an additional office building for the use of the United States Senate.

The Architect of the Capitol is authorized to make such expenditures as may be necessary to carry out the provisions of this Act, and there is hereby authorized to be appropriated for such purpose the sum of $25,000. (Appropriation reduced to $15,000—P. L. 271—July 30, 1947.)

The Architect of the Capitol, subject to the direction and supervision of the Senate Office Building Commission, the membership of which is increased from three to five members, to be appointed by the President of the Senate, is authorized and directed to prepare preliminary plans and estimates of cost for an additional office building for the use of the United State Senate.

On July 16, 1947, the President Pro Tempore of the Senate appointed Senators Revercomb, Brooks, Bridges, Green, and Overton as members of a special committee on plans for a new Senate Office Building.

Public Law 176—(H. R. 3072)—July 11, 1947:

Authorizes the preparation of preliminary plans and estimates of cost for the erection of an addition or extension to the House Office Buildings and the remodeling of the fifth floor of the Old House Office Building.

The Architect of the Capitol, subject to the direction and supervision of the House Office Building Commission, is authorized and directed to prepare preliminary plans and estimates of cost for (1) the erection of an addition or extension to the House Office Buildings for the use of the United States House of Representatives, including accommodations for parking of automobiles; (2) the remodeling of the fifth floor of the Old House Office Building to provide additional office accommodations for Members of the House of Representatives; and (3) the renewal of plumbing in the Old House Office Building.

The Architect is authorized to make such expenditures as may be necessary and there is hereby authorized to be appropriated for such purpose the sum of $25,000.

Public Law 182—(S. 686)—July 11, 1947: (Companion Bill H. R. 2996)

Provides for the construction, extension, and improvement of public school buildings in Owyhee, Nevada. Authorizes to be appropriated the sum of not to exceed $300,000 provided that plans and specifications for the construction, extension, and improvement of the said school buildings shall be furnished by the Commissioner of Indian Affairs.

Public Law 188—(H. R. 3647)—July 15, 1947: "Second Decontrol Act of 1947"

A reduced list of materials and facilities in short supply at home and abroad were continued under control to promote production in the United States and to assist export of products required for production in foreign countries of critical material urgently needed in the United States.

Public Law 190—(S. 1420)—July 15, 1947: (Companion Bill H. R. 3266)

Authorizes the issuance of certain public-improvement bonds by the Territory of Hawaii. From 1947 to 1951, inclusive, the Territory of Hawaii is authorized and empowered to issue public-improvement bonds in such amounts as will not cause the total indebtedness of such Territory to exceed $35,000,000.

Public Law 194—(H. J. Res. 170)—July 16, 1947: (Bill similar to S. J. Res. 100)

Authorizes the erection in the District of Columbia of a memorial to Andrew W. Mellon.

The Secretary of the Interior is authorized and directed to grant authority to the Andrew W. Mellon Memorial Committee to erect a memorial fountain in the District of Columbia, provided that the design and location of the memorial shall be approved by the National Commission of Fine Arts and the National Capital Park and Planning Commission, provided further that unless funds are certified available, and the erection of this memorial begun within five years from and after the date of passage of this joint resolution, the authorization granted is revoked.

Public Law 202—(H. R. 3493)—July 18, 1947: "Navy Department Appropriations Act, 1948"

Making appropriations for the Navy Department and the naval service for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $3,268,766,100.

Among other items, appropriates to the Bureau of Yards and Docks for expenses of operation and maintenance of housing projects maintained and operated as such by the Navy Department, $3,800,000.

Also appropriates to the Marine Corps for repairs and improvements to barracks, quarters, and other public buildings at posts and stations; leasing and improvement of buildings at such places as the public exigencies require; and erection of temporary buildings upon approval of the Secretary at a total cost of not to exceed $70,000 during the year; $2,000,000.

Public Law 209—(H. R. 3539)—July 21, 1947: (Similar to H. R. 3463)

Authorizes the construction of a chapel at the Coast Guard Academy and the acceptance of private contributions to assist in defraying the cost of construction thereof. Authorizes to be appropriated such sums as may be necessary.

Public Law 223—(H. R. 1882)—July 24, 1947:

Authorizes to be appropriated an additional sum of $35,000 for the purpose of cooperating with Independent School District Numbered 5, Cass County, Minnesota, at Walker, Minnesota, for the construction, extension, equipment, and improvement of public-school facilities at Walker, Minnesota.

Public Law 231—(H. R. 2825)—July 24, 1947:

Authorizes to be appropriated an additional sum of $213,000 for the purpose of cooperating with the following public-school districts in the State of Minnesota, such appropriation to be apportioned as follows: Naytahwaush, Independent School District Numbered 29, Mahnomen County—$146,000; Inger, District Numbered 6 (Deep River), Itasca County, $12,500; Lake Lena, District Numbered 129, Pine County, $12,500; Pine Point, District Numbered 133, Becker County, $27,000; Squaw Point area, unorganized territory, Cass County, $15,000; for the construction, extension, equipment, and improvement of public-school facilities, provided schools maintained by these said districts shall be available to all Indian children of the districts; provided furtner that plans and specifications for construction, extension, or improvement of structures shall be furnished by local or State authorities without cost to the United States Government, and upon approval thereof by the Commissioner of Indian Affairs, actual work shall proceed under the direction of such local or State officials.

Public Law 233—(S. 1515)—July 25, 1947: "Surplus Property for Flood Damage"

Authorizes the President, acting through the Federal Works Administrator, to employ any articles declared to be surplus under the Surplus Property Act of 1944 to alleviate damage, hardship, and suffering caused by flood or other catastrophe. The Federal Works Administration is further authorized to act through any Government agency or State or local governments to carry out the provisions of this act.

Public Law 237—(H. R. 4106)—July 25, 1947: "District of Columbia Appropriation Act, 1948"

Making appropriations for the government of the District of Columbia and other activities chargeable in whole or in part against the revenues of such District for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $95,504,737.

Among other items, appropriates for construction and continuing construction of school buildings, including preparation of plans and specifications, $3,219,230, to be immediately available. For the purchase of sites, $450,000, to remain available until expended.

Public Law 239—(S. J. Res. 123)—July 25, 1947: "Termination of Certain War Emergency Acts"

Ends a large number of war emergency measures rendered unnecessary by the termination of hostilities. Many of these measures related to authorizations for use of wartime appropriations.

Public Law 247—(H. R. 3123)—July 25, 1947: "Interior Department Appropriation Act, 1948"

Making appropriations for the Department of the Interior for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $194,587,859.

Among other items, appropriates for the expenses of the *Commission of Fine Arts*—$12,000.

To the *Bureau of Indian Affairs* for the maintenance of buildings and utilities, including the lease, purchase, construction (not to exceed $1,500 for any one building), repair and improvement of buildings—$665,000. For the construction, repair, or rehabilitation of Indian Service buildings and utilities, including the purchase of land and the acquisition of easements or rights-of-way; purchase of furniture, furnishings, and equipment; private architectural and engineering services; and water explorations as follows: *Alaska:* Schools, hospitals, dock repairs, and quarters—$400,000; *Navajo, Arizona and New Mexico:* Mexican Springs or Coyote Canon day school conversion; $150,000; Toadlena school development, $200,000; *Red Lake, Minnesota:* School, $46,000; Various locations: Employees' quarters, $300,000; major repairs and improvements—$500,000; for surveys and plans and administrative expenses, private architect and engineering service and water explorations, including personal services in the District of Columbia and printing and binding, $150,000.

To the *Bureau of Mines* for the *Anthracite Research Laboratory*—construction and equipment at *Schuylkill Haven, Pennsylvania,* including not to exceed $25,000 for employment by contract, or otherwise, at such rates of compensation as the Secretary may determine, of engineers, architects, or firms or corporations thereof necessary to design and construct said laboratory—$450,000. (Under Title II — Surplus Appropriation Rescission, the appropriation of $450,000 is carried to the surplus fund and covered into the Treasury immediately upon the approval of this Act.) For *Metallurgical research and pilot plants* . . . construction of buildings to house laboratories, pilot plants, and demonstration plants, and other items; and not to exceed $29,000 for personal services in the District of Columbia; $1,000,000.

To the *National Park Service* for administration, protection, maintenance, improvement, and preservation of national monuments, historical parks, memorials, historic sites, military parks, battlefields, and cemeteries . . .—$1,496,000.

To the *Territory of Alaska* for the construction, repair and maintenance of roads, tramways, buildings, ferries, bridges, and trails, including surveys and plans for new road construction; services as authorized by section 15 of the Act of August 2, 1946 (Public Law 600), for the preparation of plans and specifications for buildings —$3,750,000.

Public Law 253—(S. 758)—July 26, 1947: (Companion Bill to H. R. 4214) "National Security Act of 1947"

Unification of the armed services is provided to bring to the military departments in peacetime a large measure of the unity and effectiveness existing in war. Under this law a single Cabinet member, Secretary of Defense, heads three separate operating departments: Army, Navy, and Air Forces. Other sections establish a Central Intelligence Agency and provide for integration of the armed forces under civilian control and for coordination with all other departments of the Government in an efficient and adequate system for national security.

Public Law 254—(H. R. 4017)—July 26, 1947: "Terminal-Leave Bond Payment Act of 1947"

Authorizes cash settlement of bonds issued to veterans for terminal-leave pay at any time after September 1, 1947, together with interest computed to the end of the month in which payment is made.

Public Law 256—(H. R. 4268)—July 29, 1947: "The Supplemental Government Corporations Appropriation Act, 1947"

Making supplemental appropriations for Government corporations and independent executive agencies for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated, $35,500,000.

Among other items, appropriates to the National Housing Agency, Office of the Administrator, for Veterans' housing—$35,500,000, to carry out sections 501, 502 and 503 of Title V of the Act of October 14, 1940, as amended.

Public Law 262—(S. 1519)—July 30, 1947: (Companion Bill to H. R. 3952)

Amends section 10 of the Federal Reserve Act, as amended, and for other purposes. Removes restriction on Federal Reserve branch bank constructions when costs do not exceed $10,000,000.

Public Law 267—(H. R. 3678)—July 30, 1947: "Military Appropriation Act, 1948"

Making appropriations for the Military establishment for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $5,482,529,633.

Among other items appropriates to Army Corps of Engineers—$320,739,000, of which amount $191,353,000 is provided for maintenance, installation, repairs, etc., and construction of additions and extensions, etc., of *Barracks and Quarters,* provided no part of the amount of $191,353,000 shall be available for construction of a permanent nature of an additional building the cost of which in any case exceeds $20,000.

Title II makes a rescission in the appropriation (1942-1946) of $21,000,000 for Barracks and Quarters—Corps of Engineers.

Public Law 268—(H. R. 3756)—July 30, 1947: "The Government Corporations Appropriation Act, 1948"

Making appropriations for Government corporations and independent executive agencies for the fiscal year ending June 30, 1948, and for other purposes. Appropriation—$35,040,000; administrative expenditures limitations —$45,535,000.

Among other items, appropriates to the Housing Expediter for salaries and expenses: $4,125,000, of which $1,908,000 shall be available exclusively for terminal leave, to perform his functions pursuant to Title I of the Housing and Rent Act of 1947 and to liquidate the functions of the Office of the Housing Expediter performed under Public Law 388, Seventy-ninth Congress, and Title I of the Housing and Rent Act of 1947 (which liquidation shall be completed by June 30, 1948.)

Appropriates to the National Housing Agency for salaries and expenses of the Office of the Administrator—$100,000.

For annual contribution to the Federal Public Housing Authority—$4,000,000.

Among other corporations and agencies, the following corporations and agencies are authorized to make expenditures as follows: the National Housing Agency—Federal Home Loan Bank Administration, $1,400,000; Federal Savings and Loan Insurance Corporation—$532,000; Home Owners' Loan Corporation—$3,250,000; Federal Housing Administration—in addition to the amounts available—$20,000,000; Federal Public Housing Authority —of the amounts available not to exceed $2,200,000; Defense Homes Corporation $12,300, for the purposes of liquidation.

Public Law 269—(H. R. 3839)—July 30, 1947: "Independent Offices Appropriation Act, 1948"

Making appropriations for the Executive Office and sundry independent executive bureaus, boards, commissions, and offices, for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $8,188,822,927.

Among other items, appropriates to the *American Battle Monuments Commission* for salaries and expenses, including the acquisition of land or interest in land in foreign countries; personal services in the District of Columbia . . .—$312,000.

To the *Atomic Energy Commission*—$175,000,000, and in addition is authorized to contract in an amount not exceeding $250,000,000.

To the *Federal Works Agency*—Office of the Administrator—$344,540 for salaries and expenses; *Public Works Administration* liquidation, previous funds made available for "Public Works Administration liquidation" are continued available until June 30, 1948 of which not to exceed $33,000 shall be available for administrative expenses; *Public Buildings Administration*—General Administrative expenses, etc., $2,160,500. Site and building, *west central heating plant, Washington, D. C.*—additional amount $1,250,000 to remain available until expended; *Hospital center,* District of Columbia—for preliminary expenses, including acquisition of site, necessary in carrying out the provisions of the Act of August 7 1946 (Public Law 648), $1,700,000; *National Institute of Mental Health*—for the acquisition of a site or sites, the preparation of drawings and specifications, and the performance of other work for the accomplishment thereof for the National Institute of Mental Health, as authorized by section 11 of the Act of July 3, 1946 (Public Law 487), $850,000; *Bureau of Community Facilities*—Public Works advance planning: Not to exceed $895,000 of the unobligated balance on June 30, 1947, of the funds made available for public works advance planning under title V of the War Mobilization and Reconversion Act of 1944 shall be available during the fiscal year 1948 for administrative expenses incident to the liquidation of the activity for which said funds were appropriated, including the objects specified under this head in the Independent Office Appropriation Act, 1946; *Virgin Island Public Works:* For an additional amount to carry out the provisions of the Act of December 20, 1944 (Public Law 510), $1,707,687, to be immediately available; *War public works (community facilities) liquidation:* For administrative expenses necessary during the fiscal year 1948 for the liquidation of all activities not to exceed $500,000 of the unobligated balances of the funds heretofore appropriated, of which amount $50,000 shall be for payment for accumulated and accrued leave of employees separated from the Government service due to said liquidation; *Veterans' educational facilities;* The limitation on the amount for administrative expenses under this head in the Third Deficiency Appropriation Act, 1946, as supplemented by the Second Deficiency Appropriation Act, 1947, is hereby increased from $3,100,000 to $3,750,000, of which amount $395,000 shall be used exclusively for payment for accumulated accrued leave.

To the *National Advisory Committee for Aeronautics* for construction and equipment at laboratories and research stations of the Committee, $2,400,000, to be available until June 30, 1948: Provided, That in addition to said appropriation the Committee may, prior to July 1, 1948, enter into contracts for the same purpose to an amount not in excess of $2,143,000; Construction, Langley Field, Virginia—an additional amount of $5,805,000, which amount shall be available immediately; Construction, Cleveland, Ohio—additional amount $1,674,000, immediately available.

To *National Capital Park and Planning Commission* —District of Columbia redevelopment: For expenses necessary to carry out the provisions and purposes of sections 3k, 6, and 16 of the Act of August 2, 1946 (Public Law 592)—$75,000, to remain available until expended.

VETERAN'S ADMINISTRATION

To *Smithsonian Institution*—$1,800,312, which provides for, among other items, the administration, construction and maintenance, of laboratory and other facilities on Barro Colorado Island, Canal Zone, under provisions of the Act of July 2, 1940, as amended; and for the planning of a national air museum as authorized by the Act of August 2, 1946 (Public Law 722).

To the *Veterans' Administration* for administration, medical, hospital and domiciliary services—$898,040,780, provided that no part of this appropriation shall be expended for the purchase of any site for or toward the construction of any new hospital or home and of which not more than $7,807,000 of this appropriation may be used to repair, alter, improve, or provide facilities in the several hospitals and homes under the jurisdiction of the Veterans' Administration either by contract or by the hire of temporary employees and the purchase of materials.

Administrative facilities: For the acquisition of sites and the construction of regional office buildings, $3,100,000, to be available until expended, provided that the acquisition of the sites, and the preparation of the plans and specifications and construction, shall be under the supervision of the Public Buildings Administration, for which reimbursement may be made from this appropriation.

For *hospital and domiciliary facilities,* in addition to the unobligated balances of the other appropriations for this purpose and to the unobligated balance of the contract authority of $441,250,000 in the Third Urgent Deficiency Appropriation Act, 1946 (which authority is hereby extended to July 1, 1949), the Administrator is authorized to incur obligations prior to July 1, 1949, in an amount not exceeding $338,250,000, which shall be available for use, with the approval of the President, for extending any of the facilities under the jurisdiction of the Veterans' Administration. Provided, That not to exceed 6.7 per centum of the foregoing appropriation and contract authorizations shall be available for the employment in the District of Columbia and in the field of all necessary technical and clerical personnel for the preparation of plans and specifications for the projects as approved hereunder and in the supervision of the execution thereof, except that whenever the Veterans' Administration finds it necessary in the construction of any project to employ other Government agencies or persons outside the Federal service to perform such services not to exceed 10 per centum of the cost of such projects may be expended for such services; provided further, That no part of the funds appropriated in this bill or any funds heretofore made available, including contract authorizations, shall be used for the purchase or condemnation of the site or for the erection of a hospital on the tract of land in Arlington County, Virginia, known as the A. M. Nevius Tract, situated at the intersection of Lee Boulevard and Arlington Ridge Road, containing approximately 25.406 acres; or for the purchase or condemnation of a site or erection of a hospital in Tallahassee, Florida, until the Committee on Appropriations of the House of Representatives has investigated and given final approval.

Total amount appropriated to the Veterans' Administration—$6,964,457,080.

Reductions in Appropriations—Title III: Amounts available to agencies from appropriations and other funds are reduced as follows: Federal Works Agency—Bureau of community facilities: War public works (community facilities), under titles II, III, and IV of the Act of October 14, 1940, as amended (42 U. S. C. 1531-1534, 1541 and 1562), $5,100,000. Veterans' Administration: Hospital and domiciliary facilities, $50,000,000.

Public Law No. 271—(H. R. 4269)—July 30, 1947: "The Supplemental Appropriation Act, 1948."

Making supplemental appropriations for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $1,658,802,197.

Among other items, appropriates to the Architect of the Capitol, for Senate Office Building, to enable the Architect of the Capitol to carry out the provision of section 2 of the Act entitled, "An Act to authorize the preparation of preliminary plans and estimates of cost for an additional Office Building for the use of the United States Senate, approved July 11, 1947"—$15,000.

To the *Judiciary Department*—United States Courts for the District of Columbia—for plans and specifications for a Court House for the United States Court of Appeals and District Court of the United States for the District of Columbia to enable the Commissioner of Public Buildings to carry out the provision of section 5 of the Act of May 29, 1947 (Public Law 80), and the Commissioner of Public Buildings shall exercise all the powers, and perform all the duties conferred on the Architect of the Capitol by section 1 and 5 of such Act, $370,000.

To *National Institute of Health*—additional amount $500,000, including objects specified under this head in the Federal Security Agency Appropriation Act, 1948.

To *Housing Expediter*—Office of Rent Control for expenses necessary to carry out provisions of law and Executive Orders 9809 and 9841 relative to rent control—$18,074,000.

Public Law 288—(H. R. 3739)—July 30, 1947: (Companion Bill S. 1369)

The Administrator of Veterans' Affairs is authorized and directed to acquire as a site for the proposed Veterans' Administration facility at Clarksburg, West Virginia, the tract of land in Harrison County, West Virginia, situated between the West Fork River and the line of the Clarksburg and Western Electric Railway and known as the Maxwell estate.

Public Law 296—(H. R. 4002)—July 31, 1947: "War Department Civil Appropriation Act, 1948"

Making appropriations for civil functions administered by the War Department for the fiscal year ending June 30 1948, and for other purposes. Total amount appropriated, $502,123,912.

Among other items, appropriates to the *Quartermaster Corps for Cemeterial expenses:* $4,190,387 for maintaining and improving national cemeteries; *Cemeterial expenses,* no year, (Act of May 16, 1946): For all expenses necessary, not otherwise provided for, to enable the Secretary of War to carry out his responsibilities in connection with the evacuation and return to their homeland of the remains of members of the armed forces and certain citizens and employees of the United States as authorized by the Act of May 16, 1946, Public Law Numbered 383, including burial expenses or payment of allowances in lieu thereof; personal services at the seat of government and elsewhere; *construction of buildings and facilities,* acquisition of real estate or interests therein;—$60,000,000, to remain available until expended.

To the United States Soldiers' Home Trust Account, for maintenance and operation of the United States Soldiers' Home, to be paid from the Soldiers' Home permanent fund, $2,410,100, of which $296,000 shall be immediately and continuously available until expended for the preparation of plans and specifications for the renovation and enlargement of the United States Soldiers' Home.

Public Law 299—(H. R. 4347)—July 31, 1947: "Second Supplemental Appropriation Act, 1948"

Making supplemental appropriations for the fiscal year ending June 30, 1948, and for other purposes. Total amount appropriated $106,695,100.

Among other items, appropriates to the *American Battle Monuments Commission* for the permanent design and construction of memorials and cemeteries in foreign countries as authorized by the Act of June 26, 1946 (Public Law 456), and H. R. 3394, $50,000, to remain available until expended.

To the *Federal Works Agency—Bureau of Community Facilities*—for carrying out the Act entitled "An Act to extend the period for providing assistance for certain war-incurred school enrollments" (H. R. 3682), $2,500,000, of which amount not to exceed $50,000 shall be available for administrative expenses, including the objects specified under the head "Defense public works (community facilities)" in the Second Deficiency Appropriation Act, 1941, and the joint resolution approved December 23, 1941 (Public Law 371): provided, that the availability of this appropriation is contingent upon the enactment into law of said H. R. 3682. (Enacted—P. L. 317.)

To the *Bureau of Indian Affairs,* an additional amount for the construction and equipment of a new school building in the town of Moclips, Grays Harbor County, Washington, as authorized by Public Law 138 (Eightieth Congress), approved June 30, 1947,—$88,000.

Public Law 301—(S. 1361)—July 31, 1947:

Amends the United States Housing Act of 1937 so as to permit loans, capital grants, or annual contributions for low-rent housing and slum-clearance projects where construction costs exceed present cost limitations upon condition that local housing agencies pay the difference between cost limitations and the actual construction costs.

Public Law 302—(H. R. 1341)—July 31, 1947: (Companion Bill S. 229)

Authorizes the Secretary of the Navy to acquire six hundred and six and five hundred and ninety-two one-thousandths acres of land upon which the United States of America now has an option with buildings thereon at Monterey, California, for the establishment of a naval postgraduate school, including the necessary construction and alterations to provide school facilities, quarters, and collateral facilities and equipment, including the acquisition of the necessary land, at a cost not to exceed $2,500,000.

Public Law 303—(H. R. 1379)—July 31, 1947:

Authorizes and directs the Secretary of the Navy to establish the United States Naval Postgraduate School for the advanced instruction and training of commissioned officers of the Regular Navy and Marine Corps and the reserve components thereof in the practical and theoretical duties of commissioned officers. Authorizes to be appropriated such amounts as may be necessary for the post graduate school to carry out its functions as provided herein.

Public Law 309—(H. R. 3131)—August 1, 1947:

Extends until March 31, 1948 the provisions of the District of Columbia Emergency Rent Act, approved December 2, 1941, as amended.

Public Law 311—(H. R. 3448)—August 1, 1947:

Authorizes Federal home loan banks to accept mortgages having a 25-year maturity (present law 20 years) as mortgage collateral.

Public Law 313—(H. R. 4084)—August 1, 1947:

Authorizes the Secretary of War and the Secretary of the Navy to establish and fix the compensation for, within the War Department not more than thirty positions, and within the Naval Establishment not more than fifteen positions, in the professional and scientific service, with salaries from $10,000 to $15,000 per annum, each such position being established to effectuate those research and development functions, relating to the National defense, military and naval medicine, and any and all other activities of the War Department or Naval Establishment which require the services of specially qualified scientific or professional personnel. The thirty positions in the War Department and the fifteen in the Navy Establishment as authorized are to be included in the classified civil service.

Public Law 317—(H. R. 3682)—August 1, 1947:

Authorizes the Federal Works Administrator, in order to enable authorities which are still overburdened with war-incurred school enrollments to meet their needs during the transition from war to peacetime conditions, to continue to make during the fiscal year ending June 30, 1948, contributions for the operation and maintenance of school facilities. Appropriations and existing appropriations heretofore authorized (to the Federal Works Administrator) for similar purposes are hereby authorized to carry out the purposes of this Act. The amount hereinbefore authorized shall not exceed the sum of $5,000,000 for the year ending June 30, 1948.

Public Law 322—(S. 1590)—August 1, 1947:

Amends the District of Columbia rent control law so as to provide that schools and universities may recover possession of housing accommodations in certain cases.

Public Law 327—(S. J. Res. 112)—August 4, 1947:

Establishes a commission, to be known as the Marine Corps Memorial Commission, and to be composed of three Commissioners to be appointed by the President of the United States. The Commission shall consider and formulate plans for the erection upon a suitable site in Grant Park, in the city of Chicago, Illinois, of an appropriate memorial to the members of the United States Marine Corps who have given their lives in the service of their country.

Public Law 332—(H. R. 2793)—August 4, 1947:

Authorizes to be appropriated the sum of $1,500,000 for the purpose of cooperating with the State of Montana for the construction, extension, and improvement of a tuberculosis sanatorium at Galen, Deer Lodge County, Montana, to provide and make available whenever required for tuberculous Indians not less than one hundred additional beds, provided that the expenditure of any moneys authorized to be appropriated hereunder shall be subject to the condition that the proper authorities of the said State of Montana shall promptly take necessary steps under the laws of the State of Montana to provide additional funds required to complete the construction, extension, and improvement including regulation equipment of the said sanatorium and shall submit proof of compliance with this provision to the Commissioner of Indian Affairs; whereupon actual work shall proceed under the direction of the State officials and payment for such work in place shall be made monthly on vouchers properly certified by State officials to the Commissioner of Indian Affairs, whose determination and approval of the proper amount chargeable to any appropriation authorized hereunder shall be final and sufficient for such payment thereof.

Public Law 338—(H. R. 3308)—August 4, 1947:

Effective September 1, 1947 while pursuing training each veteran shall be paid subsistence allowance as follows: (a) where the service-connected disability is rated less than 30 per centum, for a person without a dependent $105 per month; and for a person with a dependent $115, plus $10 for one child and $7 additional for each additional child, and $15 for a dependent parent; (b) where the service-connected disability is rated 30 per centum or more, for a person without a dependent $115 per month, and with a dependent $135, plus $20 for one child and $15 additional for each additional child, and $15 for a dependent parent.

Public Law 342—(S. 272)—August 4, 1947:

Provides for the utilization of surplus War Department-owned military real property as national cemeteries, when feasible. Authorizes the Secretary of War to utilize and expand existing facilities at Fort Rosecrans, California and Jefferson Barracks, Missouri, when the Secretary of War determines that there is need for an additional cemetery or cemeteries for the burial of members of the armed forces of the United States.

Public Law 350—(H. R. 3501)—August 4, 1947: "Terminal Cash Payment Act of 1947"

Provides that in lieu of terminal leave, cash payments will be made on base pay plus longevity and that reenlisted personnel may take a cash payment for accrued leave or transfer accrued leave to the new enlistment.

Public Law 352—(H. R. 3862)—August 4, 1947:

The Federal Works Administrator is authorized to sell and convey to Montgomery County, Pennsylvania, at a purchase price of not less than 50 per centum of the appraised value of the land as determined by the Federal Works Agency, a certain parcel of land, which is a part of the property of the United States of America, upon which the Norristown Post Office is erected, said parcel of land to be held and used by the county of Montgomery for the purpose of erecting an additional annex to the present courthouse.

Public Law 357—(S. J. Res. 144)—August 4, 1947:

Authorizes the President to bring into effect an agreement between the United States and the United Nations for the purpose of establishing the permanent headquarters of the United Nations in the United States, and authorizes the taking of measures necessary to facilitate compliance with the provisions of such agreement, and for other purposes.

Public Law 366—(S. 1720)—August 5, 1947: "Mortgage Insurance Act of 1947"

In order to further relieve the housing shortage, authorizes the Federal Housing Commissioner to increase mortgage insurance for private home building by $200,000,000. In addition, $750,000,000 in mortgage insurance is made available to veterans to purchase permanent housing, including housing by the Government during the national defense and war period.

Public Law 368—(H. R. 3394)—August 5, 1947:

To amend the Act entitled "An Act to provide for the evacuation and return of the remains of certain persons who died and are buried outside the continental limits of the United States", approved May 16, 1946, in order to provide for the shipment of the remains of World War II dead to the homeland of the deceased or of next of kin, provides for the disposition of group and mass burials, provides for the burial of unknown American World War II dead in United States military cemeteries to be established overseas, authorizes the Secretary of War to acquire land overseas and to establish United States military cemeteries thereon.

The American Battle Monuments Commission shall be solely responsible for the permanent design and construction of the cemeteries to be established in foreign countries under section 5 of this Act and of all buildings, plantings, headstones, and other permanent improvements incidental thereto.

The Secretary of War is authorized to undertake such temporary construction as will be necessary for the accomplishment of this Act and to maintain such cemeteries in a suitable condition until such time as the functions of administration thereof shall pass to the American Battle Monuments Commission in accordance with section 12 of Public Law 456, Seventy-ninth Congress, or any other law.

Public Law 372—(H. R. 2800)—August 6, 1947:

Amends section 5 of Home Owners' Loan Act of 1933 permitting Federal Savings and Loan Associations to make $1,500 loans under the National Housing Act, to be guaranteed under G. I. Bill of Rights.

Department of Education and Research

WALTER A. TAYLOR, *Director*
THEODORE IRVING COE, *Technical Secretary*

The "Fireproof" Building

THE TIME HAS COME to cease paying undue tribute to the "fireproof" qualities of a structure as a guarantee of safety to life under fire conditions.

There has been ample evidence that a fire resistant building may protect itself under fire conditions involving serious loss of life.

The stress placed on the fireproof qualities of buildings has led to a false sense of safety to life in buildings of fire-resistive construction.

The mistaken theory that the "fire-proof" construction of a building confers fire safety upon its less-than-fire-resistant occupants is deeply rooted.

The Greater Hazard

It is high time that public officials, the framers of building codes, the designers of buildings, and the general public that furnishes the unsuspecting victims, should more definitely realize that smoke, and the accompanying super-heated air and noxious gases, which spread more rapidly than the fire from which they originate, are the principal hazard to life, regardless of the "fireproof" qualities of the structure itself.

In the Winecoff Hotel fire five persons lay dead in a room untouched by fire. Smoke and gas-filled corridors which no longer served their intended functions as safe means of egress, trapped the occupants in their rooms. Hastily knotted bed linen hanging from the windows furnished mute evidence of the inadequacy of means of egress from floors high above the street in a building which proudly advertised its "fireproof" qualities.

The deadly smoke and gases resulting from the burning of a small amount of the combustibles found in all buildings will spread from floor to floor through unprotected stairways, elevator shafts and corridors, making them not only useless as exits but also death-traps, remote from the fire.

Hazards in Every Community

The conditions primarily responsible for such tragedies as the Cocoanut Grove, LaSalle, Canfield and Winecoff disasters, are a potential hazard to the fire safety of the occupants of every hotel, multi-residential, commercial, hospital and industrial building, the stairways, elevator shafts, and other floor openings of which are not adequately protected.

Evolution of Present Conditions

Following the advent of so-called "fireproof" construction, buildings, by reason of the incombustibility of their structure, were permitted to soar heavenward and far above the reach of extension ladders and puny hose streams, with little or no regard to safety from fire.

Open stairways became part of the architectural embellishment of the structure, and elevator shafts required only such enclosure as would prevent the introduction of any segment of human anatomy into the shaft.

Reforms Not Retroactive

After the erection of many such "fireproof" structures, particularly hotels, apartments, hospitals, and office buildings, experience indicated the necessity of enclosing all vertical shaftways and openings between stories.

Requirements for such enclosures were enacted by municipalities generally but were not made applicable to buildings erected prior thereto. It is these older buildings which now present the greatest hazard to life under fire conditions.

Protection For Whom?

In the enactment and enforcement of these requirements an apparent solicitude for the vested interest in existing buildings has generally denied their occupants even the minimum degree of fire-safety which was found necessary in new buildings.

One of the most constructive results of the recent President's Conference on Fire Prevention was the report of The Committee on Laws and Law Enforcement which amply demonstrates that, from a legal standpoint, a building erected in compliance with the requirements applicable at the time of its construction is not, by reason of any vested right, exempt from complying with such reasonable safety requirements as may later be found essential to the safeguarding of life and property.

Lesson Not Yet Learned

Notwithstanding the lessons which should have been learned, as the result of continuing tragic loss of life in "fireproof" buildings, it is evident that the real hazard to life is still too little appreciated, even by many who formulate code requirements. A number of the recent reports of contemplated action to improve fire safety in hotels, and other buildings, propose that automatic sprinkler protection be installed, "unless the building is of fire-resistant construction."

Other proposals are for installation of automatic sprinklers in lobbies of existing hotels and apartment buildings where unenclosed stairways terminate only in lobby or mezzanine. It should be obvious that, in the event of fire in either the lobby or adjoining unenclosed spaces, means of egress is likely to be cut off; or that occupants would be asphyxiated before smoke and gases reach a temperature sufficient to release the sprinklers.

To be effective in its protection to the occupants of a building, sprinkler equipment must be so installed and maintained as to extinguish a fire in its incipiency and *before* sufficient smoke and gases have been created to render the means of egress unsafe, and to otherwise jeopardize lives and safety.

This is also true of the lack of protection to life afforded by an automatic fire door held open by a fusible link which requires a high degree of heat to cause it to operate.

Structural and Sanitary Safety vs. Fire-Safety

The safety of the public, from potential hazards created by structural weakness or unhealthful sanitary conditions, is jealously guarded by the enactment of protecting laws and ordinances, enforced by watchful officials responsive to every reasonable complaint or evidence of possible danger. This is in marked contrast to the inadequacy and lax enforcement of fire-safety measures.

To provide for variations in conditions, in the application of fire safety measures to existing buildings, any predetermined formula of code requirements should be subject to such administrative variance as might be deemed warranted to avoid undue hardships, providing *such variance insures the degree of fire safety contemplated by the spirit of the regulations.*

A Community Responsibility

The fire safety of the occupants of buildings, except where State laws apply, is the responsibility of the local community. This responsibility must be recognized and shared by public officials, property owners, and those concerned with the planning and construction of buildings, and with public welfare and safety, if the public interest is to be adequately served.

Many interested property owners will advance planning difficulties, and the costs involved, as compelling reasons why fire-safety requirements should not be enacted or enforced.

The minimizing of potential hazards to life under fire conditions, in existing buildings, presents a challenge and a moral obligation which should transcend material considerations and the inadequacies of slow moving safety ordinance enactments, which rarely keep pace with the results of experience and technological advances.

It should be of doubtful satisfaction to the owner of a building in which lives have been lost due to fire, or to the community in which it occurred, that they were hiding behind the skirts of obsolete ordinances in failing to provide the protection generally recognized as necessary.

The difficulties inherent in an effort to apply added safety requirements to buildings which do not meet modern standards should not be minimized.

The improvement of fire-safety conditions calls for a high degree of technical experience and skill, initiative and leadership. Enlightened public opinion and support can do much to stimulate official action.

Public Opinion

It may be assumed that the discriminations between structural-sanitary safety and fire-safety, and between older and newer buildings, are not understood by the general public. Otherwise, public demand for equal and comprehensive protection for the occupants of buildings for similar occupancy, regardless of the date of erection, would no doubt prove irresistible.

It is regrettably true that it is easier to effect the application of fire-safety requirements to existing buildings in a municipality which has suffered a material loss in a fire tragedy.

Loss of life in fire disasters quickly ceases to be front page news. Corrective action, "Locking the stable door after the horse is stolen," seldom extends beyond a community brought face to face with such a disaster.

The Architect's Responsibility

In view of the relationship of fire hazards to the planning and construction of buildings, architects should take a leading part in initiating and carrying forward the steps necessary for their correction; in buildings which no longer meet generally accepted fire safety standards, and in the planning of new structures subject to code requirements which do not adequately provide protection against the rapid spread of smoke, super-heated air, and noxious gases.

In the discharge of this service to the public the architect will not only perform his humanitarian duty, but will also contribute to the advancement and prestige of the profession as a whole.

THEODORE IRVING COE.

NOTE: The above applies to numerous types of buildings including hotels. A summary of the Department's study of causes of Loss of Life in Hotel Fires will appear in the November BULLETIN, together with Building Type Reference Guide No. 4, Hotels.

Steps in Research Programming

SINCE the publication of the general analysis of research in the March 1947 BULLETIN, the following developments have taken place which fit into the broad program in and through which the Department of Education and Research will carry out its announced policy of coordinating and instigating research:

BUILDING RESEARCH ADVISORY BOARD

The proposed research board, whose inception was noted on Page 23 of the March BULLETIN, has taken more definite form under the name, Building Research Advisory Board.

The National Research Council of the National Academy of Science, under whose auspices the B.R.A.B. will function, has announced the personnel of the Board, comprising 21 members.

Architects Wm. H. Scheick and Walter A. Taylor are members of the Board. They will represent the profession's viewpoint and requirements and, it is believed, will be able to guide the activities into channels of research having direct reference to human requirements.

By definition the Building Research Advisory Board is established under non-partisan, scientific auspices, and is to direct the policies and operations of a competent paid full-time staff. The advice of the past-President of The A.I.A., James R. Edmunds, Jr., and of Octagon staff members has been sought and heeded in the original formulation of aims and purposes. At the first meeting of the Building Research Advisory Board in November, these will be defined in greater detail and steps will be taken toward the appointment of a staff.

Building Technology Division of the U. S. Bureau of Standards

The U. S. Bureau of Standards has recently announced the formation of a new Division comprising largely staff and activities which have previously been under the several scientific divisions of the Bureau. The new Division will be under the direction of Mr. D. E. Parsons, assisted by Mr. George N. Thompson.

The new Division has sought the advice and assistance of The Institute's Department of Education and Research in determining the nature and procedures for desired research activities.

Housing Research in the Universities

Representatives of six eastern and middle-western universities met on June 24 and 25, 1947, at Ohio State University. The meeting was arranged by Mr. Harry Plummer, Co-chairman of the Joint Committee of The A.I.A. and The Producers' Council. The conferees included the President of The Producers' Council and The Institute's Director of Education and Research. The conference also included representatives of the Pierce Foundation and the Building Research Advisory Board.

The wide range of research activities reported on included the general fields of Social Sciences, Political-Legal, Economic, Physiological and Physical. More specifically included were the following subjects, among many others:

Air Cleaning; Foot Fatigue and Friction on Floors and Walkways; Illumination; Condensation; Sandwich type Walls; Attic and Crawl Space Ventilation; Combination Soil, Waste and Vent Stack; House Dehumidification; Storage and Handling of Food; Home Freezing Units; Flue Liners; Waterless Plaster; Radiant Heat Medium (other than water); Combination Cement Block and Poured Concrete Foundation; Study of Room Areas; Weights of Construction Materials; Balance Between Equipment and Gadgetry; Light Weight Concrete Aggregates; Domestic Labor Costs vs. Adequate Household Equipment; Clear Span Construction; Laundry and Kitchen Space on Same Floor Level; Basementless Floor (slab construction); Construction Efficiencies.

It should be noted that worthwhile data resulting from research cannot be pulled out of a hat. The above research activities are in process. As results become available from time to time, they will be announced or summarized in the Bulletin.

Full-Scale, Comprehensive Research on School Building

Through the joint effort of The Institute's Department of Education and Research and the School Housing Section of the U. S. Office of Education, plans are being promulgated for a long range, basic study of school building by flexible full-size units, into which a variety of windows, lighting equipment, materials and finishes may be successively introduced and tested in combinations.

This project will probably be centered in a university in which there is a school of architecture, a teacher-training college and an experimental school. The project grows out of the desire of educators and architects for findings of research not wholly subsidized by manufacturers of materials and equipment.

Engineering College Research Council

The Institute's Department of Education and Research is studying the work of the Engineering College Research Council, comprising 71 institutions, for the purpose of coordinating the work of schools and departments of architecture with the research facilities available in these institutions. In addition to the universities represented in the E.C.R.C., research in the schools of architecture is being stimulated by the efforts of the Joint Committee of The A.I.A. and the Producers' Council and of the Association of Collegiate Schools of Architecture. These efforts are coordinated by the Department of Education and Research.

National Science Foundation Act

Although the Bill to create the National Science Foundation was passed by both House and Senate, with the endorsement of leading educators and scientific and technical organizations, it suffered a defeat by pocket veto. The President's objection was directed against certain administrative details and not against the purposes or principles of the Act. It is therefore assumed that a revised bill will be enacted by the next session of Congress without much difficulty.

Supplement to Building Type Reference Guide No. 3 The Library Building

See July 1947 Bulletin, pages 23 to 58.

AMERICAN ARCHIVAL ARCHITECTURE

By Victor Gondos, Jr., A.I.A.

CHAIRMAN COMMITTEE ON ARCHIVAL BUILDINGS,
SOCIETY OF AMERICAN ARCHIVISTS

Archives are nothing more nor less than collections of records that are no longer in active use but which are considered to have sufficient retention values to be kept indefinitely. Archival repositories, however, are distinguished by a great deal of individuality in their present status and potential requirements, for there are many different kinds of archives. Such differentiations may be noted as public and private; governmental on various levels such as federal, state, and local; church archives; other institutional archives; and business archives. Although there are certain common denominators these various kinds of archives require individual treatment and solution because each presents a unique problem.

Nevertheless whatever the nature of the archives may be they have the following factors in common—the need for the safe storage of records in whatever medium the records may be, such as paper stock, microfilm, motion picture reels, broadcasting discs, maps and charts; the safe storage of records comprehends protection against fire, water, vermin, and climate; the need for the ready accessibility of the records which means the convenient arrangement of storage areas; and the need for the efficient servicing of the records which requires proper integration and equipment of areas for searchers, staff members, and the general administration of the institution.

American Progress

Until the past decade and a half America has lagged behind Europe in the erection of suitable archival plants. Since the early 1930's, however, with the establishment of the National Archives in Washington, a trend was started looking toward the creation of suitable archival establishments for the several state governments as well as for churches, and private institutions and corporations. Today modern state archival buildings exist in Illinois, Maryland, and Delaware, and archival branches of multi-function buildings exist in Alabama, Colorado, Mississippi, Virginia, North Carolina, and elsewhere; while archival projects are in various stages of development for the states of Connecticut, Iowa, Michigan, Pennsylvania, New York, Vermont, and Washington. Some church archives recently planned are those in Montreal, North Carolina, for the Presbyterian Church; and in Dunwoodie, Yonkers, New York, for the Catholic Church. Examples of recently instituted corporation archives are those of the Westinghouse Company in Pittsburgh, and the Firestone Tire and Rubber Company in Akron.

European Examples

As indicated, however, with the single exception of our National Archives building, the Continent of Europe has far more to show in archival structures ranging from converted palaces of royalty to the latest word in modern archival design and construction. Not a few of them, like the up-to-date structures of the Prussian State Archives in Potsdam and the Royal Hungarian Archives in Budapest, were badly gutted during the late hostilities, but many still remain untouched by the ravages of war. Perhaps the most notable recent example is the Swedish Archives in Stockholm. Designed and planned during 1943, this building reflects the security requirements needed for war conditions, for all the stack areas of this unique structure are underground, built into a rocky hill many feet below the surface, yet the net storage space approximates some 300,000 cubic feet! Above ground level is but a single floor, which may be likened unto the conning tower of a submarine, containing the administrative offices, staff work rooms, and main search room. The size and appointments of this structure shame our own rather modest concepts of archives buildings on a state and municipal level.

American archival establishments are usually located in multi-function buildings serving several purposes besides that of an archival repository. This is hardly an ideal condition, but of recent years a slight trend has developed toward housing archives in single-function buildings. The prime examples of unifunctional buildings are the National Archives on the Federal level and the Maryland Hall of Records on the State level.

Functions

An analysis of the annual reports of state archival institutions shows that the total range of activities that may be covered amounts to a dozen:

1. Housing noncurrent valuable records of the state government.
2. Housing historical records of the counties of the state.
3. Housing private manuscript collections.
4. Housing World War history collections.
5. Answering reference calls.
6. Publishing lists and guides to holdings.
7. Publishing books of source materials.
8. Displaying exhibits of an archival and museum character.
9. Promoting interest in local history by lectures and meetings.
10. Causing the setting of historical markers in the state.
11. Appraising and authorizing the disposal of records.
12. Inspecting the quality of papers and inks in state offices.

While the first four points above are differentiated by reason of the origin of the holdings yet, essentially, they may be treated similarly under the function of housing, since differences of origin are those of degree rather than kind. While in a very large establishment such differences would call for separately apportioned personnel, in a small establishment that would not be the case. The eighth point, relating to displays, is susceptible of such wide variations of emphasis that the resulting plan may change from a strictly archival one to that of both an archives and a museum, which are essentially two separate buildings; and if, in addition, there is an unusual emphasis on the promotion of local history the building will also assume the character of a historical society, requiring still further departure from a strictly archival plan, and thus the planners arrive at a multi-functional building.*

Multifunctional vs. Unifunctional

The argument in favor of a multifunctional building is that there exists a basic similarity of interests that brings investigators and scholars to the state library, the state historical society, the state museum, and the state records depository and that, in consequence, there is an advantage in housing these activities together. This may also be used as an argument for separate single function structures in close proximity to each other, as is the general practice on college campuses. Much depends also on the accessioning policies of the proposed archives: if it is to do a modern, up-to-date job in housing and servicing the valuable noncurrent records of the state government a single function building is much more to the purpose. Then too, from the archivist's viewpoint, an independent plan is preferable from an administrative and budgetary standpoint. Grouped under the same roof with other state institutions, the administrative tendency is overwhelming in placing the archivist on a lesser footing with respect to the state historian or the state librarian and this renders it difficult for him to successfully resist transforming the state archives into a manuscript collecting historical society. While the latter activity is, indeed, a worthy one it is not strictly that of a governmental archival agency which should be primarily concerned with the noncurrent records, administrative and legal, of the state or local governmental agencies which it is designed to serve. In addition to the foregoing considerations the multifunction building often requires a very complicated plan and a complicated plan may well cost more per cubic foot than a simple and direct solution.

---

* There is also a trend toward adding still another activity—the inspection, rehabilitation, and preservation of historic properties.

In the Twentieth Biennial Report of the North Carolina State Department of Archives and History the desirability of an independent archival establishment is clearly espoused in the statement that "The Department should be provided with a separate building . . . the Department can render more effective service if it is in a building all to itself, where conditions meeting its special requirements can be maintained." Another mistaken assumption that must be guarded against is the belief that because the archives is to house the noncurrent records of the state it is practicable, economical, and advantageous to provide space for it in a newly projected state office building. With respect to this fallacy the Vermont Public Records Commission states, "The opinion and practice in other states is overwhelmingly against including archives in office buildings . . . it will be only a question of time before the current files of the various offices will consume all available space and crowd the archives out into some other building. Furthermore space for archives calls for different building specifications than office space, such as *height of ceiling,* lighting, special protective equipment, vaults, etc."*

Program

But whether a multi-function or single-function building is to be designed, the most perplexing problem that will be likely to confront the architect is the difficulty of getting the statement of a coherent, detailed program on the basis of which workable plans can be made, so that groping in the dark and losing an unconscionable amount of time and effort may be avoided. In the archival field no tested and compiled standards exist as they do in library and school work. Differences of opinion exist as to whether the document areas should be library-stack construction or cellular-vault construction; whether documents shall be filed flat or filed vertically; whether windows in stack areas are or are not injurious to records; whether flexibility of plan should be or should not be sacrificed to achieve monumental effects; whether lighting should be fluorescent or something else; whether the entire building should be air-conditioned or only such areas where the staff is likely to operate; whether provisions should or should not be attempted to care for records in other mediums than that of paper, such as motion pictures, microfilms, and broadcasting discs.

Other major questions relate to the optimum ratios under any given set of objectives and conditions of the space distribution in the building as, for example, the square-foot ratio between the three major divisions, the administrative areas, the stack areas, and the search and service areas, and their respective subdivisions. How much space shall be donated to public relations, that is to the lobby and exhibition hall? How large a library can be afforded or is necessary? Laboratories and workshops for photographic duplication, for processing of records, and for cleaning and rehabilitating records will have to be carefully considered for space, equipment, and layout.

Policies

In order to plan effectively, the quantitative nature of the problem will have to be projected years ahead. Generally such advance estimates of requirements are projected for from ten to twenty years. To do this necessitates the gathering of three sets of data: (1) the accessioning policies of the archival institution, (2) the existing accumulation of noncurrent records of permanent value, and (3) the expected annual rate of accumulation of noncurrent records of permanent value.

Questions will arise with respect to accessioning policies, such as whose records are to be housed in the archives, and what will be the criteria for accepting or requisitioning records? State archives derive their accessioning policies from the pertinent statutes. Church and institutional and corporate archives will predicate their policies on directives of their respective governing bodies. Since the particular problems of each kind cannot be separately treated, the discussion will be confined to the state archival level, and adjustments of treatment can be interpolated by the reader.

---

* Cf. *First Report* of the Public Records Commission to the General Assembly of the State of Vermont (Montpelier 1944).

State archives are faced by the question of whether they shall act as depositories for noncurrent county records as well as noncurrent state government records. Assuming the division of state records into three temporal categories—current, semicurrent, and noncurrent—shall the archives deal also with the semicurrent records or only with the noncurrent? Shall a projected records survey cover all types of records, furnishing a complete picture of all ramifications of the state government both in the capital and in the state at large? The latter is the best policy for thorough programming and planning.

Volume

What shall be the unit of measurement in surveying records? How shall the various sizes and shapes of records and their respective containers be accounted for? Since the use of standard filing-cabinets is quite general, it is possible to arrive at satisfactory approximations by converting the measurement of all letter- and legal-size materials to so many numbers of file drawers. In planning the building the interest will shift to two key dimensions, namely, cubic feet and square feet, because space consists of area and volume. Consequently the end results of the survey should show clearly how many cubic feet of materials are to be immediately accommodated, and the rate of increase. In records work it has been customary to use linear feet also as a unit of measurement, but in such cases the depth and height of the material is understood to conform to a conventional pattern so that it can be easily converted to volume and area occupied, as, for example, so many linear feet of four-drawer cabinets; but wherever such a convention is not clearly understood it should be specifically stated. The ultimate objective at all times is to arrive at an estimate of volume and area needed.

Three Phase Accessions

Significant for the housing of records, and consequently for the breakdown of the survey data into the three temporal categories previously mentioned, is the present-day trend towards a three-phase procedure, favored by such progressive records administrations as that of the Tennessee Valley Authority, and those of the Army and the Navy: (1) the housing of active current records directly in the offices of origin; (2) the housing of semicurrent records directly in less costly space and cheaper containers, using storage or warehouse space and a minimum of service; and (3) after the disposal of records of little or no further value, the transfer of an elite core of permanently valuable records to a professionally conducted, specially planned, fireproof archival depository.

With the nature and probable volumes of records determined, the tentative operating policies of the archivist should be sufficiently sketched to permit the compilation of a schedule of personnel to be housed and the equipment they are to use. Conditions will vary according to whether the building is to serve archival activities only or whether it is to be a multifunctional structure combining the functions of the archivist, the historian, the librarian, and sometimes that of the museum curator. Here, for simplicity, the archival unifunctional type of structure is emphasized, and an average condition based upon existing practices assumed. Thus the population served by the state archives is assumed at about 3,000,000 persons. On that basis the average capital investment will be between $300,000 and $500,000, and the annual operating expense may amount to $40,000. These figures are far from ideal but experience to date indicates they are within reasonable expectation of attainment. It is true, however, that contemporary averages rest upon a very small statistical base, since in all the 48 states there are only some half a dozen with distinct archival buildings or organizations and, with one exception, they are not located in the wealthy and populous eastern and middle-western states.

Plan Elements

The core of an archival building consists of the stacks. All administrative, service, and mechanical facilities should be grouped around the stacks. Stacks should be so designed that different types of containers, such as boxes, cabinets, roller-drawers, and trays are interchangeable. Areas within fire-division walls should not be too large. The National Fire Protection Association recommends 40,000 cubic feet as the maximum space within fire divisions of a storage area. Openings should be kept to the minimum and fitted with fire-resisting doors and windows. All interior trim, floors and ceilings should have a fire-resistance rating of at least two hours. Loading standards cannot be definitely stated, but stack-floor live loads as high as 175 pounds have been suggested, although with open-type shelving, occupying 35 per cent of the floor area, a general floor load of 110 pounds has been used. Some other suggested live loads are 150 pounds per square foot for general storage space, 175 pounds for film storage vaults, and 100 pounds for offices, corridors and other public spaces. In determining floor and column loads in one archives building (Illinois), filing cases were figured at 33 pounds per cubic foot and bookstacks at 30 pounds per cubic foot.

Flexibility

Flexibility is a most important factor, since there is no one type of record container which is ideal for all records under all conditions. For certain records, such as bound volumes, fixed library stacks of the standard types are satisfactory; for other records steel cabinets with sliding drawers are preferable; while for still other needs cardboard containers on open shelves for either vertical or flat filing may best answer the need. The tier height need not exceed 7′-6″. Double-faced ranges may have a width of 3′ and more. Range aisle widths should be about 2′-6″. Cross aisles should be 3′ or more, and main aisles may be 4′ or more. In planning storage areas, provision should be made for processing records, such as reboxing space, as well as space for oversize materials such as maps and charts and newspapers. Space should also be allowed for sorting-tables, record trucks, and smaller equipment.

On the other hand the wastage of space should be avoided. Some elements contributing to wastage of archival storage are low floor-load capacity in areas with high ceilings, the use of single-faced stacks where double-faced should be used, the use of steel equipment where open shelving would be sufficient, the improper installation of utility lines in stack areas, and oversize halls and offices which use space that should have been planned for storage areas. Conversely there is apt to be inadequate storage space for unused equipment, waste paper, and for records processing.

Vaults

Vaults are distinct from stack storage space in that they are as firesafe as it is humanly possible to make them. Vaults should have a strong independent structure, and not merely a thin brick or plaster veneer. Reinforced-concrete floors should be 6″ thick or more, and walls, floors and ceilings should be of reinforced concrete with ½″ rods on 4″ centers in both directions. Steel framework should have 4″ of fireproofing. The roof should be about 8″ thick and capable of withstanding an impact load of 500 pounds. The vault should be limited to 5,000 cubic feet content with a maximum height of 11′. Wall construction should be solid with no air spaces. Ventilation may be permitted only through door openings; while walls, floors and roofs should not be pierced, and should also be effectively waterproofed but not with combustible membrane or coating. No refinishing of any sort should be done inside a vault. A phone or alarm should be installed inside the vault for communication in emergency.

In all other storage areas it is preferable to have air-conditioning with a constant temperature of 70° F. and 50 per cent humidity.

Functional Areas

Space may be apportioned in four functional categories: administration, operations, stacks, and public areas. Space allotted to the administrative function includes the offices of the archivist, his assistants and the clerical force, requiring some 1,000 to 1,200 square feet in the type of building here chosen as a norm. For carrying on the operations of receiving records, fumigating and cleaning, repairing, photoduplication, custodial space and equipment storage, a total of about 2,400 square feet will be advisable. Public areas consist of reference and search-room space requiring about 1,000 square feet, and the lobby, coat-room, corridors, stairways, elevators, toilets, and whatever exhibition and projection rooms can be afforded.

If space above the indicated minimum is available, the administrative rooms may consist of a board room, the archivist's office, secretarial space, separate staff offices, a conference room capable of accommodating the entire staff, and the usual toilets and closets. It would be well to add a smoking-room, perhaps in conjunction with rest rooms for men and women, and also individual lockers. Kitchenette and lunch space, if included, should be planned so as to be as completely separate as possible from all records areas in order to aid in keeping records as safe as possible from vermin and rodent life.

A certain amount of space is needed for building services, such as superintendent's or janitor's supplies, workshop for carpenter or mechanic, machinery space, storage for ladders, storm windows, and screens, toilets and showers, loading-space and garage.

Approximately 400 square feet is required to accommodate a small fumigating tank of about 5′ x 5′ x 5′, and one cleaning table and its filter unit, and a standing press and equipment for minor repairs. The ideal space is 20′ x 20′ and not narrower than 15′. The fumigating tank should rest on a floor designed for a live load of 300 pounds per square foot. The cleaning unit consists of a table with hood, air compressor and accumulating tank (80 pounds pressure), hose with air trigger, and filter unit. The repair room may also approximate 400 square feet and contains a small laminator, such as the Barrows Laminator which is less costly and much more suitable than the steam-heated hydraulic press, some work tables, a sink, a drying-rack, a paper press, a table paper-cutter, and a desk and closet space.

For photoduplication a space approximately 12′ wide and 16′ long, with a ceiling height of preferably 12′, should be reserved for photographic and microphotographic camera work and accesory activities such as mounting and finishing. A photostat workroom to contain photostat machine, drier, trimmer and similar equipment, should be about 12′ wide and 16′ long. A chemical-mixing area, which can also be used as an entry way or light trap to afford admittance to the darkroom, could be accommodated in a space 6′ x 8′. An office space 9′ by 12′ is sufficient. Any small space available, say 6′ x 6′ should be reserved for the storage of photographic papers, chemicals and accessory equipment. In locating the photographic area a dry basement is preferable, but care should be taken that all dampness is avoided, and that there is even temperature and humidity.

Summary

To recapitulate and to emphasize salient points, it may be said then that the essential features of a modern archival building are—

1. A building constructed in as fire-safe manner as possible, using non-inflammable trim and finish throughout.
2. A complete air-conditioning system, as nearly dust-proof as possible, which will maintain a constant temperature of 70° to 74° F. with a relative humidity approximating 50 per cent for 24 hours a day.
3. A complete automatic fire-alarm system.
4. Stack areas to be so planned as to be separated by fire walls from adjoining offices or other stack areas in order to prevent fire spread.
5. Avoid admittance of ultra-violet or infra-red rays to stack areas.
6. Interchangeable stack equipment and maximum flexibility of stack space.
7. Adequate and efficient lighting in the stack areas as well as in the administrative offices and search room.
8. Sufficient space allocations to receiving-room, cleaning and fumigating room, records-repair room.
9. Sufficient space allocations for custodial purposes, machinery, and equipment storage.
10. Administrative offices and public search room should be separate from the stacks but adjoining the stacks, with provision for supervision of search room and stack entrances.
11. If means permit space may also be allocated for exhibition, audio-visual and conference purposes.

Plans for Reference.

A collection of archival plans is available in the National Archives Library, for study and reproduction. These plans, deposited in the Library by the Committee on Archival Buildings of the Society of American Archivists, include drawings for the Alabama Memorial Building, the Delaware Hall of Records, the Maryland Hall of Records, the Stockholm Municipal Archives, the proposed Vermont Hall of Records, and the Archives Division of the Virginia State Library.

Photostat copies may be ordered at cost. Selection may be made as between plans, elevations and details of any of the buildings.

College and University Libraries

To A MUCH GREATER EXTENT than public libraries, college libraries present individually unique problems. Here, perhaps as much as in any type of structure, the architect must insist upon and aid in the preparation of a careful, comprehensive program.

The physical elements and equipment of college libraries do not vary greatly, but there is great variation in program elements such as ratio of general to special collections, accessibility of stacks, spaces in stacks for study, research, classes and seminars, special collections. Other variables are the size and location of reserve book rooms, study halls, faculty offices, in addition to the newer non-book services found in public libraries, such as microfilm, micro-card, music collections.

For the average and smaller colleges, "College and University Library Buildings," by Edna R. Hanley, is a most useful guide. For the larger university libraries the reports of the Orange and Princeton Conferences, and the references on Massachusetts Institute of Technology, Iowa State University and Princeton University, should be studied.

HAYDEN MEMORIAL LIBRARY

Massachusetts Institute of Technology

The essence of the program problem was the preservation of existing, remote special and departmental libraries, to be serviced from the new main building, plus the special emphasis upon general and assigned reading for courses in the humanities in an institution devoted primarily to the sciences and technology. Other special requirements are spaces for two print collections and the Dard Hunter Paper Collection.

The design by Voorhees, Walker, Foley and Smith, based on a program by John E. Burchard, Director of Libraries, provides almost the maximum possible flexibility for use and remodelling.

State University of Iowa

THE PROJECTED LIBRARY for the State University of Iowa, Iowa City, is attracting a great deal of attention in the library world. Keffer & Jones of Des Moines are the architects and R. E. Ellsworth is Director of Libraries for the University.

This library building will be the first large-scale and complete application of modular* library planning, which has been the subject of much theorizing and discussion since it was first advocated in 1932.

The ultimate plan is a solid block approximating 300 ft. square, 5 or 6 stories in height. The first unit somewhat less than full area, and 3 stories high, will cost approximately $1,000,000.

The 19½ x 27 ft. module will be used throughout all floors, permitting complete flexibility and interchange of book stacks and non-bearing partitions at any time. All services (electrical, air-conditioning, etc.) will be continuous in columns, floors and ceilings. Columns, including ducts, will be approximately 18″ square, ceiling heights 8′-2″ and total ceiling-floor thickness 15″.

Complete dispersion of the services will permit subdivision of the module space into study carrels, conference rooms, offices and other smaller spaces at any point, at any time.

Floor construction will permit removal of any bay at any time to create two-story spaces. Prefabrication and standardization of shelving and partitions will permit almost complete salvage in remodeling.

Air-conditioning and complete dependence upon artificial light in most of the building make possible the large unbroken plan area which in turn permits greater flexibility in allocation and lower cost of general construction.

Present planned utilization includes a lecture hall seating 250, numerous seminar and conference rooms, visual-aid rooms, offices and carrels. No one subdivision of any of the large reading areas will seat more than 30 without an intervening island bookcase or partition.

The floor area in more than two-thirds of the building is completely fluid, capable of accommodating any library activity at any time without structural revision.

The estimated occupancy, including classes and conference groups, is 800 per floor. All material, excepting a small percentage of rare books, will be available on open shelves. Stacks and reading-spaces are generally interspersed throughout the building.

---

* Not to be confused with the 4-in. modular dimensioning now being widely adopted in the building industry and known as Modular Coordination.

University of Pennsylvania

Another large university library project, at the University of Pennsylvania, combines undergraduate, advanced and research facilities for service to the university, with service to neighboring institutions and industries, and to individual scholars not in the University.

The building will be planned for a working capacity of two million volumes. It will be completely air-conditioned because of the noise and dirt in the locality, and will depend largely upon artificial light.

The planning will be based on a modified modular system, with stack interval of 4′-5″ as a horizontal unit and stack height of 7′-7″ for vertical unit.

The plan will include two types of seminar rooms grouped with one of classroom type between two of reading-room type.

LIBRARY LIGHTING

By James M. Ketch[*]

(Paper presented at American Library Association Convention, San Francisco, July 1, 1947.)

Although libraries engage in many types of educational activities and provide a variety of interesting exhibits, most visitors to libraries go there to read, or to select materials for reading elsewhere. It is obvious that reading, and other difficult visual tasks encountered in libraries, determine the objectives of lighting quantity and quality which are necessary for the visual comfort and efficiency of the visitors and employees.

Reading—Relaxation or Work?

Reading, to many people, is a means of relaxation and, because it is not accompanied by physical exertion, it is too often considered an effortless activity. To others, reading is work, and one who finds it necessary to read all day becomes fatigued in both mind and body and turns, perhaps, to the physical exertion of the garden or golf for relaxation. It is obvious to one who analyzes the subject thoroughly that reading is a task which makes definite demands upon the human resources of eyesight, nerves, energy and mind. Furthermore, the inefficient expenditure or utilization of these resources has a wearing effect upon us both immediately and permanently.

Reading, like physical exertion, varies greatly in its intensity: it ranges from the scanning of headlines, or browsing, to the intensive work of the research student who reads footnotes as well as text. Readers of both classes will be found at any one time in reading rooms.

The Visual Task

Variations in the type of reading matter usually found in libraries cover as wide a range as the intent of the library visitors. We find near one end of a scale which measures the difficulty of the visual task, newspapers and similar materials, printed in 7-point type, unleaded, on low-contrast, off-white, pulp paper, and legal reference books with long paragraphs and condensed type. Near the other end of the scale, the less difficult reading tasks are illustrated by the better text books and novels printed in 8-12-point type, well-leaded, on a good white, non-glossy, book paper. Between these points, reading as a visual task varies enormously.

Libraries serve people of all ages, from those of the elementary school age to their grandparents. The condition of the eyesight of these visitors covers a wide range also. Statistics pertaining to defective vision reveal a high percentage of eye defects throughout all ages; there is convincing evidence, also, that its prevalence increases with age and varies with the occupational use of the eyes. Children of elementary school age group have the highest percentage of normal eyes, whereas some 95% of those people at the age of 70 have defective vision. Part of this can be attributed to natural physiological changes with added years, but all too much is caused by the demands we make on our eyes and the prevailing poor conditions for seeing.

---

[*] General Electric Company, Nela Park, Cleveland, Ohio.

Although errors of refraction are generally correctable, there are many people who, for one reason or another, have inadequate corrections, or none at all. Libraries, where reading is the predominant activity, should recognize these conditions and feel their responsibility by giving every reasonable seeing aid to their readers and furnish seeing conditions which will aid in preventing those visual defects that are preventable.

WHAT CAN THE LIBRARY DO ABOUT IT?

The foregoing variations in the intensity and purpose of those who are reading, the visual task and the human beings, have been presented to indicate the importance and magnitude of the job lighting has in the library. Lighting which is entirely satisfactory for such visual tasks is more than the mere installation of lamps and reflectors to achieve certain footcandle values. Modern lighting techniques are based upon authoritative researches which indicate that reading is easier and more efficient under higher levels than under low values, but with the provision that if the maximum of visual comfort and seeing efficiency is to be attained, the brightness of the visual task in relation to the brightness of its surroundings—table top, wall, ceiling, and floor—must have equal consideration. Some of these aids to comfortable seeing are simple and can be made as a part of the normal maintenance procedure; others involve major changes in both the lighting and the interior appointments which require careful architectural advice and supervision.

Basically, reading as a visual task includes three factors: (1) the eyes with all of their variations, (2) the reading matter, and (3) the illumination. The betterment of any or all of the three leads to easier seeing, but the first two are beyond the control of the library and outside the scope of this paper. Good lighting, and the supplementary environmental factors that aid good seeing, are changes which libraries *can do something about* when major alterations are to be made or new buildings designed.

Fortunately, we have considerable data from which to draw our conclusions: not only has the ease and efficiency of reading been the object of many researches, but, because types, leading, and papers are easily varied or duplicated, reading has become the standard visual task for many other researches on the relation between illumination and seeing.* Added to these researches are the more recent developments in lighting techniques as applied in the fields of offices and schools where the visual tasks are similar to those of libraries.

THE LANGUAGE OF LIGHTING

FOOTCANDLES—define amount of light per square foot falling onto a surface. Illuminating engineers design a lighting system by weighing all of the variables in the system and arriving at an average footcandle figure that will be received on the work plane, table tops, etc. The usual footcandle values in practice range from 5 to 100 according to the difficulty of the visual task encountered.

BRIGHTNESS, (FOOTLAMBERTS)—Defines the amount of light per square foot that is transmitted by, or reflected from, a surface. The brightness of any diffusing, transmitting or reflecting medium is the product of the footcandles falling onto it, and its transmission or reflection factor. For example, 50 footcandles falling onto two surfaces, a book having an 80% reflection factor and a table top having 10%, will produce brightness of 40 footlamberts for the book, and 5 for the table top.

BRIGHTNESS RATIO—where the greatest ease of seeing is desired for a given visual task, such as reading a book, the lighting designer must be concerned with the brightness of all objects and surfaces which fall within the normal field of view. The ratio of the brightnesses of the visual task (book) and its immediate background (table top) is of particular importance. Other brightnesses (walls, furniture) that fall within the normal field of view are similarly important; these may include higher brightnesses (windows, light sources) that become glaring, and those that are of lesser brightness than the visual task. Brightnesses that are much higher, or lower, than that of the book are bidding for the reader's attention, with the resulting decrease in the ease of reading and increase in strain and fatigue. Within the immediate field of view, brightness ratios of not more than 3 to 1 are desirable and, within the entire room, ratios of not over 10 to 1 are recommended. See Table II.

---

* A valuable text on this subject is "Reading As A Visual Task", Luckiesh and Moss, D. Van Nostrand Company, New York, 1942.

A.I.A. File D-5
R-2

Recommended Footcandle Values—Quantity of Light—The following footcandle recommendations parallel those in the Proposed Standard Practice of School Lighting, and the Recommended Practice of Office Lighting recently approved by the Illuminating Engineering Society.

The recommended footcandle values are graduated according to the difficulty of the seeing tasks. The values should be *maintained in service* through proper cleaning of lighting equipment, replacement of depreciated or failed lamps, and the maintenance of room surfaces. Initial values must be greater by a percentage sufficient to compensate for the normal depreciation expected in service.

TABLE I

	Footcandles Current Recommended Practice
Difficult Seeing Tasks	50
Involving: (a) Discrimination of fine detail (6-8-point type, footnotes, etc., legal reference books with small condensed type; illustrations with fine details, etc.) (b) Poor contrast (newspapers, maps; pencil notes, carbon copies, etc.) (c) Long periods of time (study; research reading). Illumination of this order recommended for sight-saving classrooms in schools is of benefit similarly for those having sub-normal eyesight, or for older persons carrying on work or reading of the following classification.	
Ordinary Seeing Tasks	30
Involving: (a) Discrimination of moderately fine detail (reading 8-12-point type, children's books; general and private office work; active file and mail rooms; cataloging; book repair and binding.) (b) Better-than-average contrast (reading better magazines and books). (c) Intermittent periods of time (browsing or casual reading; book stacks; card files; check-in and check-out desks).	
Casual Seeing Tasks	10
Such as: Conference and reception rooms, stairways; washrooms, checkrooms; and other service areas; auditoriums; storage rooms where labels must be read.	
Simple Seeing Tasks	5
Such as: Hallways, corridors, and storage rooms involving no reading of labels.	

The foregoing are recommended with no reference as to the type of illuminant, luminaire or type of lighting system. It is essential, however, that careful consideration be given also to environmental factors and brightness ratios of the principal room surfaces, especially in those areas where 50 and 30 footcandles are to be used for the more difficult visual tasks.

Quality of Illumination—Environmental Factors—The Committee on Standards of Quality and Quantity for Interior Illumination of the Illuminating Engineering Society has summarized many researches on brightness and brightness ratios for the greatest visibility, and comfort or ease of seeing. This report gives us the basis for recommended maximum ratios of luminaires seen against their background; ratios for the brightness of the visual task (a book) to its surroundings (the table top); and data that make it possible to specify the reflection factors for all major surfaces in a room to comply with the limiting brightness ratios recommended. In this report, the immediate surroundings of a task include the area falling within 30 degrees from the line of vision in all directions.

It is desirable and practical to reduce the brightness differences usually encountered in libraries to ratios no greater than those in the following table:

TABLE II

Limiting Brightness Ratios Recommended for Areas Where Difficult or Ordinary Seeing Tasks Are Done

(a) Between parts of immediate central visual area, such as book and reading table top	3 to 1
(b) Between the tasks and the more remote surfaces in the field of view, such as book and walls	10 to 1

(c) Between luminaire, or the sky (if visible), and the ceiling or wall adjacent in the field of view .... 20 to 1

(d) In no case should the ratios anywhere within the normal field of view exceed .... 30 to 1

These ratios are maximums and reductions are generally beneficial.

Reading Table or Desk Finishes — One reading a book cannot avoid seeing also the table or desk top which occupies most of the visual field. In order that the ratios recommended in Table II may be attained, the table or desk tops should be moderately light in color, see Table III, and in order to prevent reflected glare, the finish should be matte or non-glossy. These can be provided by blonde and unstained light woods, or by the application of light materials, such as linoleum designed for this purpose.

Room Finishes—Seeing comfort is influenced also by room and furniture finishes; in combination with the lighting system, they determine the brightness pattern of the interior, and the relation between it and the task brighness. In addition to the comfort factors, light finishes in a room of given size improve the utilization of the light because they act as secondary light sources of large area which contribute to the total footcandles received on the reading plane. In addition, the shadows are softer, the illumination more uniform, and there is less chance of objectionable reflected glare of light sources in polished or glossy surfaces. Medium light, rather than dark floors, are recommended, as the floor is often visible to a person who is seated and reading.

The following recommendations establish approximate reflection factors which aid in obtaining the recommended brightness ratios suggested in Table II.

TABLE III

Recommended Reflection Factors

Ceilings	80-85 percent
Walls	50-60 percent
Desk and table tops	35-50 percent
Furniture	35-50 percent
Floors	15-30 percent

These recommendations permit, in addition to white, the use of off-white tints which have a high reflection factor: ivory, cream, etc. In order to compensate for light absorption in the holes or cavities of some acoustic materials, a white finish of high reflection factor should be used.

Reflection factors higher than those recommended for the walls are not desirable, and if a dado is used on the lower walls, a color having 30-35 percent reflection factor can be used.

Color By Architect—The reflection factor and the generally non-glossy surfaces are recommended without any preference for color; the lighting engineer feels that the specification of actual colors or tints should be made by the architect or his interior decorator. Problems of color harmony in an interior, the use of warm or cool colors with regard to geographical location and oriented with respect to the color of the predominant natural illumination, and those of balancing colors in any room to minimize color fatigue, are those for which the color specialist can make the most acceptable recommendations. It is essential, however, that color specifications be made with due regard for the actual illuminant to be used and colors should be selected under the light of the same.

ARTIFICIAL ILLUMINATION

Most libraries are designed to utilize natural daylight as much as possible. Daylight varies in amount geographically, seasonally, and throughout the day. It is obvious that, with few exceptions, the artificial lighting system should be designed to provide the quantity and quality of illumination required independent of any aid from daylight. Especially is this important where the buildings are used at night and for inner rooms, stacks, and other areas where little daylight penetrates.

In many reading rooms, daylight alone can be used for a few hours, artificial light alone will be needed for others, and there will be transition periods when part of each can be used. Flexibility for this transition is best obtained by switching each luminaire independently, although a satisfactory arrangement is to switch rows, or groups of luminaires, in units parallel to those windows furnishing the predominant amount of light.

Incandescent vs. Fluorescent—Problems of lighting changes require decisions as to

A.I.A. File D-5
R-2

whether incandescent or fluorescent light sources shall be used and decisions as to the type of lighting system. Calculations must be made as to the cost of the initial installation, the cost of the lighting per footcandle per year, and the suitability of the source and system in connection with the architectural design of the interior.

Extensive researches with common illuminants differing in spectral character, including incandescent and fluorescent, have revealed no unique advantages in visibility and readability of common reading materials. In other words, illuminants having spectral characteristics acceptable for general use show no difference in the effectiveness per footcandle. Furthermore, ease of seeing is apparently uninfluenced by the spectral character of the illuminant. Both illuminants have been used in libraries successfully.

From the standpoint of air-conditioning, the total heat load generated by the lighting system is in direct proportion to the total watts in the room. For filament lamps, the load is the total lamp watts; for fluorescent, it is the total lamp watts plus the ballast watts. Because fluorescent lamps are roughly twice as efficient as filament lamps, the total watts required by fluorescent lamps to produce a given footcandle value is about half that required for filament lamps. If air-conditioning is not used, fluorescent lamps will add half as much to the air temperature per footcandle as will filament lamps.

The initial investment in a fluorescent lighting system is higher than for an equivalent filament system: the lighting equipments are larger and more of them are needed. Since fluorescent lamps have a longer life—3000-4000 hours for average operating conditions as compared with 1000 hours for filament lamps, lamp replacements are less frequent, but the fluorescent system will require more time for cleaning and maintenance. Fluorescent luminaires are available in a wide variety of types and construction; in some, the construction is simple, with easy access to the lamp; others are less simple. The lamp replacement and cleaning problems should be considered and luminaires selected which are easy to relamp and clean. Artificial skylights or louverall systems built into high ceilings should be accessible from an attic space above, or provision must be made for portable extension-ladder maintenance devices to be operated from the floor level.

Relative Costs—The higher initial investment in a fluorescent system to produce a given illumination level is usually counter-balanced by the lower cost of electrical current; the higher efficiency of fluorescent lamps requiring about half the total wattage and half the cost of current. Over a ten-year period, including the amortization of the investment in equipment, the cost per footcandle per year for the two systems is about equal, although it may vary slightly one way or the other, depending upon the rate paid for electrical current. Systems having long hours of use generally show the lower cost for fluorescent lighting; areas of low hours of use will probably find the cost advantage for filament lighting.

So far, the two illuminants have been considered as being used separately. There is no inconsistency, however, in combinations of the two. Fluorescent lighting has the advantages of high efficiency in the production of light, low production of heat, and adaptability to modern architectural design; filament lamps, on the other hand, are simple and compact and, because the light source is relatively small, a wide range of light patterns are possible, varying from the broad distribution of the silvered-bowl lamps to spot or flood beams for downlighting. Filament lamps and 3500K fluorescent lamps are the closest in color match; 4500K fluorescent are somewhat bluer but suitable for use with filament lamps. Because daylight fluorescent lamps are bluer yet, they are probably best used alone, or used in such a way that the light is mixed with that of filament lamps before reaching the reading level.

ARTIFICIAL LIGHTING SYSTEMS

Most lighting systems are included in one of the following five classifications:

TABLE IV

	Distribution of Light from Luminaires	
Classification	Upward	Downward
Indirect	90-100%	10- 0%
Semi-indirect	60- 90%	40-10%
General diffusing	40- 60%	60-40%
Semi-direct	10- 40%	90-60%
Direct	0- 10%	100-90%

The systems listed above have diverse characteristics and adaptability to the architectural design of the building and interior. It would be very desirable if library lighting could be standardized. It is evident, however, that every library presents an individual problem, with the result that as many types of lighting treatment can be used as there are architectural variations. Any of the above-listed systems can be used successfully if due consideration is given to the footcandle and quality requirements.

Indirect Lighting—Most of the light from indirect luminaires is directed to the ceiling and upper sidewalls, which in turn, reflect it diffusely to the work plane. In effect, the entire ceiling becomes the apparent light source. This large-area, low-brightness source produces a lighting system in which the shadows are soft and reflected glare from polished surfaces is low. For best appearance, the ceiling should be lighted uniformly. The proper ratio of the spacing of the luminaires to their suspension distance is about 4 to 1.

Since indirect lighting is lower in utilization than direct types of lighting, it is essential that the ceiling be finished in as light a color as possible and that it be maintained in good condition, using matte ceiling finishes.

Opaque or translucent luminaires in a wide range of shapes and styles are available for filament lamps. One of the most efficient of the incandescent indirect luminaires is that using silver-bowl lamps, which require a minimum of maintenance. A few indirect luminaires for fluorescent lamps are now available and more will undoubtedly be developed. The uniformly bright extended fluorescent lamps are well-suited for cove lighting which, however, is generally low in utilization and is best used as a decorative supplement.

Semi-indirect Lighting—Similar in characteristics and requirements to indirect, but more light comes directly from the luminaire to the work, the utilization being somewhat higher than for indirect. The luminaire itself becomes a larger factor in the brightness pattern. As the percent of direct lighting from the luminaire increases, the danger of objectionable direct and reflected glare increases, particularly with filament lamp units.

General Diffuse Lighting—Directing light about equally upward and downward. Some typical units have also a strong component of light in the near horizontal angles. The direct glare that results from enclosing globes makes them unsuited for lighting areas devoted to close visual work, but they are well-suited for hallways and service and storage areas.

Another type falling into this group, commonly called direct-indirect, directs most of the light up and down, but has a very low component of light in the near horizontal angles. This type of unit has characteristics similar to the following semi-direct system.

Semi-direct Lighting—The desirable characteristics of this system include the higher utilization of light from the strong downward component with enough light being directed to the ceiling to relieve the darkness of the ceiling encountered with most types of direct lighting. When used to light reading rooms, fluorescent equipments are preferred because of the larger luminous areas, softer shadows, and lower reflected glare. Some luminaires of this class are open-bottom louvered; others are covered at the bottom with diffusing glass or plastic materials.

Direct Lighting—This system has the maximum utilization and the simplest maintenance. On wide spacings, shadows may be objectionable, and an undesirable brightness ratio obtained between the luminaires and the adjacent ceiling areas. Dark ceilings can be lightened by providing other indirect sources, and to some degree, by the use of light-colored floors, table tops, and furniture. Direct lighting becomes more acceptable for library use as the luminous area becomes larger, or where the luminaires are spaced closer. One of the types of direct lighting employed at check-out desks and other places where light is wanted over a restricted area, is the prismatic plate type installed flush in the ceiling.

Direct lighting by fluorescent luminaires can be installed so that the resulting illumination approaches indirect lighting in quality. Typical of this are continuous rows of recessed troffers located on close centers with the lamps shielded from direct view within an angle 45 degrees below the horizontal. In the hands of a skillful designer, the continuous rows become luminous architectural elements that have possibilities in creating ceiling patterns.

A modern form of direct lighting is known as the louverall system. This system employs a wall-to-wall system of multi-cell louvers above which are located fluorescent lamps on spacings which make the vertical louver blades reasonably uniform in brightness. The lamps can be equipped with trough reflectors or, more simply, located in a shallow cavity which, for best efficiency, should be painted or finished in a light color.

A variation of the louverall system is the coffer system. These are essentially cavities, finished in a light color, containing a battery of fluorescent lamps with a two-way louver system covering the cavity opening. Coffers become architectural elements having a wide range in the possibilities of architectural treatment because of the brightness patterns that are possible. Maintenance of all of these louvered systems is good because dirt falls through the louver openings and has little tendency to collect on the vertical surfaces of the louver blades. For offices and reading rooms, the louvers should be designed to shield all lamps from view within 45 degrees from the horizontal.

Coffer openings can also be covered with glass or plastic materials. If the material used is diffusing, it is likely that the coffer area so covered will be of fairly high brightness. Since there will probably be little light from the coffer plates illuminating the ceiling area between coffers, the contrast in brightnesses may become uncomfortable. Indirect illumination from other sources will brighten the ceiling areas, or it can be aided by having light table tops, floors and lower sidewalls. The collection of dirt on these flat transmitting surfaces will increase the maintenance necessary and also cause a more rapid depreciation of the light output.

DAYLIGHTING SYSTEMS

Windows serve two valuable purposes from the standpoint of the seeing tasks in the library: first, they admit light into the area which builds up as footcandles for seeing; second, they permit occupants to look out. There is a definite seeing advantage in being able to focus on distant objects at frequent intervals to relax the eyes from the close vision task of reading. It is important, however, that the maximum benefit of more footcandles be obtained from the upper sections of the windows without also introducing objectionably large areas of high brightness into the seeing environment.

Modern architects are well-trained in the problems of the distribution and utilization of daylight. They are aware of the importance of the shape and position of the window opening, the desirable ratios of window area to floor area, the effect of the ratio of window height to room depth, as well as the effect of outside light intensity and sun position in producing illumination inside the room.

From the standpoint of maintaining comfortable seeing conditions in a reading room, several items are of importance:

1. Clear plate or window glass are the usual materials for windows. The upper portion of the windows contribute most to illumination to the far side of the room. Sky or cloud brightness from this portion of the window can be controlled by shades, baffles or Venetian blinds. These are usually white, and drawn during the evening hours.

2. Fluted, ribbed or diffusion types of glasses will, in general, create a higher window brightness and corresponding glare than clear glass. If used, they will need careful shielding by adjustable shades or blinds. A new type of prismatic glass block is now available which is very effective in directing sunlight onto the ceiling and thus aiding in its utilization and distribution to the far side of the room. Shading is necessary for certain positions of the sun. Some buildings now use these prismatic blocks in the upper window area in combination with clear glass lower sections which allow room occupants to look out of doors.

THE LIGHTING OF SPECIFIC AREAS

The foregoing discussion has been devoted to general lighting, to the types of illuminants and luminaires which are applicable, and to the creation of a brightness pattern which is the most comfortable and acceptable to room occupants.

Specific lighting needs to be considered for reading tables in certain types of libraries, for lighting carrells and for the lighting of book stacks.

Lighting for Reading Tables—The trend in reading room lighting in those libraries that have a fairly high over-all utilization of the space is toward general lighting of a footcandle level which makes all parts of the room suitable for reading without supplementary table illumination. The reason is evident when one considers the commonly recognized shortcomings of individual or group reading lamps in a large area: (1) In spite of the fact that the best reading position is with the book held at right angles to the line of vision, the book must be laid flat, or nearly so, to get light from the lamp on the pages. (2) People accustomed to having the light from a local light come from a given direction—from left and rear for example—must accept light from another source position, depending upon where they are seated. (3) Table lamps located in front of the reader create disturbing reflected glare images in the glossy paper used for many magazines and in some books. (4) Unless table lamps are located closely together, some readers get much more light than others. (5) The multiplicity of reading lamps in a large room creates a cluttered appearance.

Research, law, and medical libraries, on the other hand, may have fewer occupants at any one time and, in the interest of conservation of electricity, the general illumination can be of a medium footcandle level—20-30 footcandles supplemented by reading lamps capable of adding an equal amount. The brightness ratios suggested previously can be obtained by so balancing the general and supplementary illumination, and by using light-colored table tops, walls, etc.

The greatest difficulty with table lamps occurs when lighting long, wide tables to be occupied on both sides. Pedestal lamps, or the often-suggested continuous trough lighting, located at the center of the table, puts the light source in front of the reader where it is most likely to produce reflected glare for some readers from glossy paper and from wet ink or soft pencil notes. The continuous trough may be less satisfactory than individual lamps because the reader will find it almost impossible to position himself to dodge reflected glare. Tilting the book to avoid reflections generally means a reduction of the illumination. It also induces an unnatural reader position which will be maintained for a short period of time only.

Several methods of lighting have been suggested for lighting tables occupied on one side only, for this kind of intensive reading. Ideally, the light should come from the left and from a fairly large, low-brightness source which is completely shielded from the view of the reader. It is desirable also that the source be high enough above the table so that the light is spread across the table.

One such unit was used by the U. S. Navy in the study halls of the V-12 courses during the war. Each contained two 18-inch 15-watt fluorescent lamps and produced some 50 footcandles over the critical work area. These were used for a battery of tables, with the result that while each student received most of his light from the left, he got also a smaller amount from the study table unit on his right. Light table top finishes and a 50-percent reflecting wall at the front completed the comfortable brightness pattern. This type of lighting is less suited to tables with readers on both sides, as the units on the opposite side of the table are likely to become sources of reflected glare.

Carrell Lighting—The carrell for single occupancy is usually slightly over four feet square, and the height of the book stacks—just over seven feet. A common method of lighting is by means of a short-stem indirect luminaire to the left of center and about a foot to the rear of the writing shelf. Indirect luminaires with 100-watt silvered-bowl lamps produce about 10 footcandles; higher values would be in proportion to the light output of the lamps. Another recently proposed plan is to use in each carrell two 4-foot 40-watt fluorescent lamps located at the left wall and ceiling corner, and at the similar rear corner. These lamps in trough reflectors, carefully louvered to shield the lamps from view, will produce 30-40 footcandles on the reading shelf. Local lighting devices on the reading shelf are not recommended.

Book Stacks—The present widespread practice of lighting book stacks from unshielded 60-

watt filament lamps located on the ceiling and spaced 4-6 feet apart is not satisfactory. The lamps are glaring, the illumination spotty, and in general, insufficient light is obtained on the titles at the bottom. A number of lighting equipments are available which help in reducing glare and, to some degree, in getting light to the bottom of the stacks. There is much to be desired in any of the present methods.

Enough experimental work has been done with reflector shapes on fluorescent lamps to indicate a series of researches to be followed by the Library Lighting Committee of the Illuminating Engineering Society. This committee includes members from the American Institute of Architects and members from large libraries.

Book Shelves—Many school libraries, and the smaller branch libraries, use book shelves at the perimeter of the reading room. Those rooms which are lighted by general illumination sufficient for good reading should find no need for specific shelf lighting.

CO-ORDINATION OF LIGHT AND ARCHITECTURE

There is need for a very close co-ordination in the work of the designing architect and that of the illuminating engineer in the lighting of both existing and new libraries. It is in this field that light plays a dual, and difficult, role. It becomes an architectural element capable of the finest expression of light, and shade, and modelling; but it must be at the same time a work light for difficult visual tasks, the like of which are found in offices and factories. If light is used for either viewpoint to the exclusion of the other, it fails to fulfill its complete responsibility.

The illuminating engineer looks to the architect to establish the architectural plan of both exterior and interior. This includes some indication as to the type of lighting and the resulting pattern of brightness which he thinks is most suitable architecturally. Before building plans have been frozen, however, the lighting engineer should be given the chance of exploring these suggestions as to their practicability and checking the resulting illumination for quantity (foot-candles) and quality (distribution and brightness ratios). The time for the consideration of lighting is at the beginning of the building plans, not at the end.

The architect will find that with the standard filament lamps plus the newer fluorescent light sources, and with the new techniques that have developed recently, he has a wide range of lighting tools with which he can work. Any of these poorly applied will be unsatisfactory, but when intelligently used, lighting will serve its double purpose as a means of decoration and as a source of illumination for difficult visual tasks.

Supplementary Bibliography on Library Planning

See July Bulletin, pp. 45-54.

COLLEGE AND UNIVERSITY LIBRARIES

College and University Libraries and Librarianship.

An examination of their present status and some proposals for their future development. Prep. by the Coll. and Univ. Postwar Planning Comm., A.L.A. and Assoc. of Coll. and Ref. Libs. 1946. (Planning for Libraries Series, No. 6.) $2.50.

A forward-looking discussion of the status of college libraries with suggestions for improvement of services and recommendations based on the present situation.

Recent Trends in Small College Library Buildings.

Hanley, Edna R. *Libr. Jour.* v. 70: pp. 1164-68. Dec. 15, '45.

Signpost in Virginia.

Conference of architects and librarians. Burchard, John E. *A.I.A. Jour.* v. 5: pp. 23-7. Jan. '46.

Teaching with Books.

A study of college libraries. Branscomb, Harvie. Chic., Amer. Lib. Assoc. 1940. 258 pp. $2.50.

Based on visits to 60 colleges, it considers the extent to which the efforts of libraries—from standpoint of effectiveness—are integrated with those of institutions as a whole. Addressed to college presidents, teachers, librarians, and others responsible for undergraduate education.

College and University Library Buildings.

Hanley, Edna R. Chic., Amer. Lib. Assoc. 1939. 152 pp. illus. $4.50.

Photographs, floor and section plans or elevation drawing, comparative cost and size data, and critical comment for 42 buildings erected (with one exception) during 1917-'38. Covers essentials in planning; selection of site and type of architecture, reading rooms, circulation desk, public catalog, delivery hall, coat rooms, administrative offices, work rooms, bookstacks, heating, ventilating, air conditioning, lighting. Bibliography of illustrated and descriptive articles.

Cooperative Committee on Library Building Plans.
The Orange Conference at Snead & Co., Orange, Va., Oct. '45. Phila., Stephenson Bros. 1946.

Cooperative Committee on Library Building Plans.
The second Princeton Conference, June 1946. Phila., Stephenson Bros. 1947.

Essentials in the Planning and Equipment of a University Library.
Bonser, W. *Arch. & Bldg. News.* v. 186: pp. 45-6. Apr. 19, '46.

Report of the Committee on Buildings and Architecture for the War Years.
Coll. & Rsrch. Libs. Jan. '47.

Developments in the University Library.
O'Connor, Robert B. *A.I.A. Jour.* v. 6: pp. 284-89. Jun. '46.

University Libraries.
Bibliography. *Arch. Rec.* v. 100: p. 114. Nov. '46.

The Atlanta University Library.
An architectural interpretation. Atlanta, The University. 1937. 24 pp. illus.

Postwar Plans for a University Library.
Univ. of Pennsylvania. David, Charles W. *Coll. & Rsrch. Libs.* pp. 112-18. Mar. '45. Reprints avail. Amer. Lib. Assoc.

The Library as a Teaching Instrument.
University of Iowa, 1945.

The University Library.
Wilson, Louis R. and Tauber, Maurice F. Univ. of Chic. Press, 1945. Chapt. XIV—Buildings and Equipment, pp. 455-92. Bibliog.

The Administration of the College Library.
Lyle, Guy R. New York, H. W. Wilson Co. 1944. Chapt. XV, The Library Building and Equipment. Bibliog. $4.50.

Tomorrow's Libraries for Teachers Colleges.
Alexander, Carter. Oneonta, N. Y. Amer. Assoc. of Teachers' Colls. 1944.

A check list to aid in securing library plant and equipment equal to the expected demands on these institutions.

Future of the College Library.
Davidson, Carter. *Coll. & Rsrch. Libs.* pp. 115-19. Mar. '43.

Library for a Liberal Arts College.
Liturg. Arts. v. 11: p. 58. May '43.

American College Libraries in the Postwar Era.
McEwen, Robert W. *Coll. & Rsrch. Libs.* pp. 293-97. Sep. '42.

The University Library Building.
The Amer. School and Univ. (yrbk.), 1941.

Library Storage Building.
Orr, R. W. and Thompson, L. S. *Libr. Jour.* Feb. 15, '42.

Iowa State College Library.

Principles of College Library Administration.
Randall, William M. and Goodrich, F. L. D. 2nd ed. Chic., Amer. Lib. Assoc. 1941. 250 pp. $2.50.

Western State College Dedicates a New Library Building.
Bartlett, Evelyn. *Libr. Jour.* pp. 283-84. Apr. 1, '40.

Essentials of a University Library Building.
Walter, Frank K. *Coll. & Rsrch. Libs.* pp. 40-7. Dec. 1940.

Plans for Harvard's Undergraduate Library Disclosed.
Laing, A. K., A.I.A. *Libr. Jour.* v. 71: p. 1134. Sep. 1, '46.

Harvard University Undergraduate Library.
A.L.A. Bull. p. 161. May '46.

A Library for the Undergraduate College.
Laing, Alexander, A.I.A. *Coll. & Rsrch. Libs.* pp. 314-21. Sep. '40.

College and University Library Service.
Trends, standards, appraisal, problems. Kuhlman, A. F. ed. Chic., Amer. Lib. Assoc. 1938. 159 pp. $2.50.

Standards for College Buildings.
Evenden, E. S., Strayer, G. D., Engelhardt, N. L. Teachers' Coll. Bur. of Publications, Columb. Univ. 1938. Libraries, pp. 126-53.

An Estimate of Standards for a College Library.
McCrum, Blanche P. Lexington, Va., Journalism Laboratory Press. 1937.

The College Library Building.
Gerould, James T. Chic., Amer. Lib. Assoc. 1932. 116 pp. $2. (Originally publ. by Scribner's).

Basic principles and standards; site, plan, special rooms, circulation desk, catalog, book stack, offices, workrooms, coat rooms, lavatories, equipment, flooring, lighting, heating, ventilation, costs.

College Architecture in America.
Klauder, C. Z. and Wise, H. C. New York, Scribner's. 1929. 300 pps. illus. Chapt. V, Libraries.

Obsolescence of Books in College Libraries.
Gosnell, Charles F. Chic., Amer. Lib. Assoc. 1944.

Junior College Library Program.
A study of library services in relation to instructional

procedures. Adams, Harlen M. Chic., Amer. Lib. Assoc. 1940. 92 pp. $2.

PUBLISHED PLANS

See Published Plans, pp. 51-54, July 1947 Bulletin.

See also Bibliography in Hanley, E. R., "College and University Library Buildings."

ARCHIVES BUILDINGS

Strong Room Construction.
The Archivists Point of View. British Records Assoc., Tech. Sect. *Bulletin* No. 16, pp. 3-8. '46.

Strong Room Construction.
The Architect's Point of View. Carter, Edward. Brit. Records Assoc., Tech. Sect. *Bulletin* No. 16, Pp 9-14. '46.

Notes on Showcases.
Atkinson, R. L., Brit. Rec. Assoc. Tech. Sect. *Bulletin* No. 16. Pp. 20-3. '46.

Essex Records Office.
Some Notes on Shelves and Boxes. Emmison, E. G. Brit. Rec. Assoc. Tech. Sect. Bulletin No. 16. Pp. 14-18. '46.

A Public Record Office for Virginia.
Van Schreeven, Wm. J. *Commonwealth*. v. 8: pp. 17-18. Oct. '41.
Gives some data of interest to architects.

Archives and Libraries 1940.
Kuhlman, A. F., ed. Chic., Amer. Lib. Assoc. 1940. 136 pp. $2.
A.L.A. Conference proceedings of the Public Documents Committee include discussions of problems of smaller depositories; publications of new state agencies; survey of Federal depository system, and depository law; and documents of several foreign countries. The archives sections and volumes include papers on the Historical Records Survey and American Imprints Inventory.

What's in an Archives Building?
Young, T. J. *Arch. Forum*. v. 73. Aug. '40.

Protection of Records.
National Fire Protection Assoc. Comm. on Protect. of Records. Boston, 1939. 88 pp.

The Illinois State Archives Building.
Norton, Margaret C. *American Archivist*, v. 1: pp. 78-90. Apr. '38.
Describes one of the few buildings specifically constructed for archives work.

Hall of Records, Annapolis, Md.
Arch. Rec. v. 79: pp. 194-97. Mar. '36.

Essential Fittings of a Muniment Room.
British Records Assoc. *Proceedings* No. 2. pp. 24-25. 1935.

Advisory Committee on the National Archives Building.
Report *In* National Archives, Annual report 1935. pp. 51-8. Washington, D. C. 1936.
Report originally submitted in 1930.

Some Considerations on the Housing of Archives.
Simon, Louis A. *In* American Historical Assoc. Annual report, 1916. v. 1: pp. 147-51. Washington, D. C. 1919.

Fixtures, Fittings and Furniture.
Paltsits, Victor H. *In* Amer. Hist. Assoc. Annual report 1913. v. 1: pp. 265-66. Washington, D. C. 1915.

Report.
Illinois State Education Bldg. Commission. Springfield 1913. 61 pp.
A portion of this is devoted to architectural aspects.

Technical and Research News

Proposed Clinic Service on Construction and Specifications

The Executive Committee of The Board of Directors of The Institute has approved in principle the recommendation of the Department of Education and Research that the Department develop a clinic service and a means of sharing among architects their experiences on faulty, or satisfactory, performance of materials.

A limited advisory service of this type has been provided in the past by the Technical Secretary, but very few members have made use of it. The service will now be activated and broadened.

While the details have not been fully developed, the essentials of the proposed procedure are:

The Department of Education and Research would receive confidential reports from members, giving complete accounts of unsatisfactory performance and all attendant circumstances.

The Department staff would analyze the difficulty and attempt to indicate the cause, remedy or precautions for future use. Limitations in the number of Department staff preclude personal inspections.

Where desirable, the problem would be taken up with a technical specialist of one of the numerous bureaus or scientific agencies with which the Department is in continuous contact and cooperation, or with the technical staff of the appropriate trade association or individual manufacturer.

In the latter case, an inspection might be possible. The Department would report its findings to the architect concerned.

In sharing the experience and findings of selected cases with the membership by means of a summary published in the BULLETIN, complete anonymity would be preserved. The name of the architect, the product and the manufacturer would be omitted, the problem being described as accurately as possible with these limitations.

The statement of policy published on Page 23 of the March, 1947, BULLETIN should be emphasized in this connection:

> "2. While The Institute should provide or assist in providing to its members the best and most reliable data regarding building materials and equipment, The Institute cannot assume for its members the responsibility of selecting and controlling the use of materials. This is a local matter of personal judgment and skill and is of the essence of professional service."

Opinions rendered by the Department of Education and Research would not constitute A.I.A. endorsement or disapproval of materials or products involved. The proposed "clinic service" would be solely a consulting service of The Institute to its members, and a statement to this effect would accompany every individual or published report.

Inasmuch as the success of the proposed service depends so largely upon the willingness of members to participate, preliminary announcement is made at this time. The Department is prepared to receive cases for investigation or comment, and will welcome suggestions regarding any aspect of the proposed service, as described herein.

After further study and experience, and with due regard to the responses to this notice, a more detailed statement will be issued.

CONVENTION SEMINAR PAPERS

In accordance with Convention action, the addresses and lectures given at the pre-Convention Seminars in Grand Rapids, April 26 and 27, 1947, have been printed as an A.I.A. publication.

The papers were prepared and presented by eleven specialists from other professions and by eight architects.

The collection comprises six papers on Urban Planning, seven on Hospitals and five on Schools. One copy of the document will be sent without charge to each person who registered for the Seminars. It will be available at $3 to members and $5 to non-members, postpaid.

School for Building Officials

The first annual School for Building Officials was held in Chicago from June 30 to July 3, 1947, sponsored by the Building Officials' Conference of America and the Midwest Conference of Building Officials and Inspectors.

Approximately two hundred building officials sat through four days of intensive lecturing and discussion. Architects on the "faculty" were Mr. John O. Merrill, A.I.A., of Chicago, and The Institute's Director of Education and Research. Other participants, registered as architects, appeared as technical specialists or officials of various organizations.

Housing Research at Louisiana State University

The Department of Low-Cost Housing Research at Louisiana State University is sponsoring, in addition to its other activities, a Louisiana State Housing Exposition. The Exposition will be held in the campus Coliseum, November

19-23, 1947. The A.I.A. Department of Education and Research is assisting in an advisory capacity. Architect O. J. Baker, Director, was formerly on the staff of the Small Homes Council, University of Illinois.

The Joint Committee of The Institute and The Producers' Council

The personnel of The Joint Committee is as follows:

Representatives of The Institute:

Raymond M. Marlier, Co-Chairman, Empire Building, Pittsburgh 22, Pennsylvania.
Harold D. Hauf, Department of Architecture, Yale University, New Haven, Conn.
James W. Minnick, Front & Harris Streets, Harrisburg, Pennsylvania.

Representatives of The Council:

Harry C. Plummer, Co-Chairman, 1756 K Street, N. W., Washington 6, D. C.
A. Gordon Lorimer, 116 John Street, New York 7, N. Y.
F. J. Plimpton, 101 Park Avenue, New York 17, New York.

The Joint Committee is to consider all matters of a technical nature bearing upon the interests of The Producers' Council and The American Institute of Architects and to make recommendations thereon to their respective organizations through their Boards of Directors or appropriate executives and committees.

New Chapter Representatives for Collaboration with Department of Education and Research

Nat W. Hardy, President, has been appointed in the Texas Coastal Bend Chapter.
C. W. Shaver, Jr., has been appointed in the Wyoming Chapter.

New Appointments to Technical Committees

Rhees Burket, of the Washington, D. C. Chapter, has been appointed as the representative of The Institute on the Standing Committee for Testing and Rating Convectors, Commercial Standard CS140-47, of the U. S. Bureau of Standards.

Professor George M. McConkey, of the Detroit Chapter, has been appointed a representative of The Institute, as alternate to John C. Thornton, on ASA Committee A88—on Oxychloride Floors.

ASA Project A91-Specifications for Building Granite

There has been organized under the ASA Sectional Committee procedure, with the National Building Granite Quarries Association and The American Institute of Architects as Joint Sponsors, ASA Project A91 — Specifications for Building Granite.

The representatives of The Institute on the Sectional Committee are J. Gerald Phelan, of the Connecticut Chapter, and the Technical Secretary.

School Lighting

ASA Committee A23 is making good progress in revising the "American Recommended Practice of School Lighting," for which the Illuminating Engineering Society and The Institute are Joint Sponsors.

It is expected the new edition will be approved as an American Standard and published before the end of the year.

Proposed Plumbing Code

The proposed American Standard Plumbing Code, work on which by Sub-committee I, and a Sub-group of ASA Committee A40, has been proceeding for several years is nearing completion. Suggested modifications of the latest draft are now the subject of a letter ballot, following which the Code will be submitted for approval and adoption by ASA as an American Standard.

"Modular Grid Lines"

The issues of "Modular Grid Lines," are presenting practical examples illustrating the application of the principles of Modular Coordination in the preparation of architectural drawings for various types of buildings.

As previously mentioned architects who address a request to Modular Service Association, 110 Arlington Street, Boston 16, Mass., will be placed on the mailing list to receive this informative bulletin.

THE WEATHER VS. FIRE PREVENTION

Mark Twain's well known observation concerning the maximum of talk and minimum of action with respect to the weather does not apply to a situation which effects each and everyone of us and concerning which we should both talk and act, for action in this case can prove effective.

The National Fire Protection Association continues its efforts to bring home to our careless public that 1,700,000 needless fires each year mean a fire somewhere every 20 seconds of each and every day.

On the material side these fires represent a loss of about $1,500,000 for each day of the year, and the irreplaceable and tragic loss of some 11,000 lives. As we faced a critical shortage of lumber for needed housing last year forest fires, for which careless smokers and campers are usually responsible, destroyed enough timber to build 200,000 five-room homes, while fires resulted in a sufficient number of lost man-days to build 1,000,000 badly needed automobiles, if they could have been made available to that hard pressed industry.

We may not be able to do much about the weather but the wasteful destruction of life and property by fire can be greatly reduced, for fire prevention is largely the application of plain, common sense.

SOLID FUEL RESEARCH

Recognizing the fact there are problems common to solid fuels the anthracite, bituminous and coke industries have joined in an extensive program of research.

A three year study has been undertaken, at the University of Illinois, the major objective of which will be the development of basement layouts, integrating fuel storage and handling, ash removal and the arrangement of heating facilities for the most convenient and satisfactory use of solid fuels.

Consideration is also being given to the redesign of heater bases to provide for an ash receptacle in the base as standard equipment.

The aid of the vacuum cleaner industry will be enlisted to determine the feasibility of developing units for the removal of ashes from boilers and furnaces.

HANDS ACROSS THE SEA

Charles E. Bantin, A.R.I.B.A., 23 Ansell Road, Upper Tooting, S. W. 17, England, has written The Secretary of The Institute as follows:

"With a view to a mutual exchange of news of developments in design, materials and construction in both our countries, I would be glad to hear from any member of your Institute who would be interested in corresponding with me at intervals to give this news and answer queries, etc.

"If you could arrange to bring this suggestion before your members, I would be greatly obliged, as I feel that such an arrangement would be of great value to both parties."

MODULAR DESIGN SCALES

As an aid in applying the principles of Modular Coordination in the preparation of architectural drawings The Palmer Manufacturing Company, 3207 - 11th Street, South, Arlington, Va., has made available a series of modular scales, both vertical and horizontal, for various types of masonry layout, including different familiar bonding patterns.

In addition to the projection scales there are available grid sheets, in a variety of sizes, for use by designers as underlay on the drafting board.

A request addressed to The Palmer Manufacturing Company will bring detailed information.

HOMEBUILDING ACTIVITIES

The U. S. Department of Labor's Bureau of Labor Statistics reports that private builders started 80,000 new permanent homes in July, representing the highest record for that month in twenty years and approaching the all-time high record of 1925.

Homebuilding for the first seven months of 1947 showed an increase of 38,300 units over the same period in 1946, and up to August 16 of this year 441,000 units have been put under construction.

Bureau estimates show that in the first seven months of this year 428,700 non-farm dwellings have been made ready for occupancy.

Technical Bibliography

NEW STANDARDS AVAILABLE

The National Bureau of Standards announces the availability of the following, copies of which may be obtained from the Superintendent of Documents, at the price indicated.

Simplified Practice Recommendation R179-46, Structural Insulating Board (Wood or Other Vegetable Fiber).

Supersedes R179-42. Includes dimensions and finishes of building board, sheathing, insulating plaster lath, roof insulation board, tileboards, plank, and interior factory finished boards.
5 cents.

Simplified Practice Recommendation R266-47, Standard-Grade Galvanized Ware.

Of particular interest in connection with building maintenance and fire extinguishing equipment. 5 cents.

American Standards Association:

American Standard Building Code Requirements

As sponsored by The American Iron and Steel Institute, and the American Society of Civil Engineers, this is the first American Standard covering light-weight floor construction.

It is intended for use by municipal and state officials as a means of increasing uniformity in building code requirements, and as specification material it will also be of informative value to architects and engineers.

Copies may be obtained from ASA at a cost of 35 cents.

American Standard Sizes of Clay Flue Linings—for Steel Joist Construction A87.1-1947. A62.4.

With the approval of this standard, Clay Flue Linings take their place in the growing list of building materials the dimensions of which have been coordinated in accordance with the principles of Modular Coordination.

Printed copies of this Standard are now in course of preparation.

American Standard Specifications for Gypsum Plastering—Including Requirements for Lathing and Furring ASA A42.1-1946.

A revision of the 1938 edition with changes which reflect recent research and technological advances.

Copies available from ASA and ASTM—35 cents.

The American School and University.

The American School Publishing Corporation, 470 Fourth Avenue, New York 16, N. Y.
$4.00.

The 19th Annual Edition of this illustrated 650-page, comprehensive reference volume is available.

The table of contents includes an informative series of articles by well-known architects, educators, technicians, and others interested in, I. Planning the School Building Program; II. Technical Facilities for School and College Buildings; III. Instructional and Service Facilities; IV. Equipment and Supplies; V. Working Data for School Planners, with a section devoted to building products and services.

The National Fire Protection Association:

60 Batterymarch Street, Boston 10, Mass., announces the availibility of the following, copies of which may be obtained at the prices indicated:

Code for Protection Against Lightning.

The 1947 edition of the Code prepared under the Sectional Committee procedure of the ASA with the NFPA. The National Bureau of Standards, and The American Institute of Electrical Engineers as Joint Sponsors. 50 cents.

Protection of Records.

This is a consolidation of the officially adopted reports of the Committee on Protection of Records as presented at the annual meetings of NFPA 1942-46. The present edition includes the Survey and Classification of Records; Record-Keeping Procedures; Intensity, Duration and Control of Exposure; Specifications for Fire-Resistive Record Vaults and File Rooms; and Equipment for the Protection of Records. $1.00.

The Architect's Manual of Engineered Sound Systems.

The Radio Corporation of America, Architectural Relations Sound Products Section, Camden, N. J. $5.

Provides detailed and authoritative information relating to planning and installation of sound reproducing systems for places of assembly, and other types of occupancy.

THE AMERICAN INSTITUTE OF ARCHITECTS

THE BOARD OF DIRECTORS

OFFICERS

(Terms expire 1948)

Douglas William Orr, President
96 Grove St., New Haven, Conn.

Searle H. von Storch, Vice President
Scranton Lackawanna Trust Bldg., Scranton, Pa.

Alexander C. Robinson, III, Secretary
1740 East 12th Street, Cleveland, Ohio

Charles F. Cellarius, Treasurer
St. Paul Building, Cincinnati 2, Ohio

REGIONAL DIRECTORS

(Terms expire 1948)

Arthur Ward Archer, *Commerce Trust Bldg., Kansas City, Mo.* .... Central States District
Earl T. Heitschmidt, *449 South Beaudry Ave., Los Angeles, Calif.* .... Sierra-Nevada District
Richard Koch, *908 Queen and Crescent Bldg., New Orleans, La.* .... Gulf States District
John L. Skinner, *Ingraham Bldg. Annex, Miami 32, Fla.* .... South Atlantic District

(Terms expire 1949)

Paul Gerhardt, Jr., 121 N. LaSalle St., Chicago 2, Ill. .... North Central States District
William G. Kaelber, *311 Alexander St., Rochester 7, N. Y.* .... New York District
Joseph D. Leland, *814 Statler Bldg., Park Square, Boston 16, Mass.* .... New England District

(Terms expire 1950)

Allan H. Neal, *324 Fourth Ave., Pittsburgh 22, Pa.* .... Middle Atlantic District
George Cannon Young, *Utah Savings & Trust Bldg., Salt Lake City 1, Utah* .... Western Mountain District
Kenneth C. Black, *706 Capitol Savings and Loan Bldg., Lansing 68, Mich.* .... Great Lakes District

STATE ASSOCIATION DIRECTOR

(Term expires 1950)

Branson V. Gamber, *515 Hammond Bldg., Detroit 26, Mich.*

THE EXECUTIVE COMMITTEE OF THE BOARD

(Terms expire 1948)

Douglas William Orr, *Chairman*
Alexander C. Robinson, III, *Secretary*
Charles F. Cellarius
William G. Kaelber
Richard Koch
Branson V. Gamber (*Alternate*)

HEADQUARTERS

1741 New York Avenue, N. W., Washington 6, D. C.

Edward C. Kemper, *Executive Director*
Henry H. Saylor, *Editor of the* Journal *and* Bulletin
Edmund R. Purves, *Director of Public and Professional Relations*
Walter A. Taylor, *Director of Education and Research*
Theodore Irving Coe, *Technical Secretary*
John J. White, Jr., *Field Secretary*